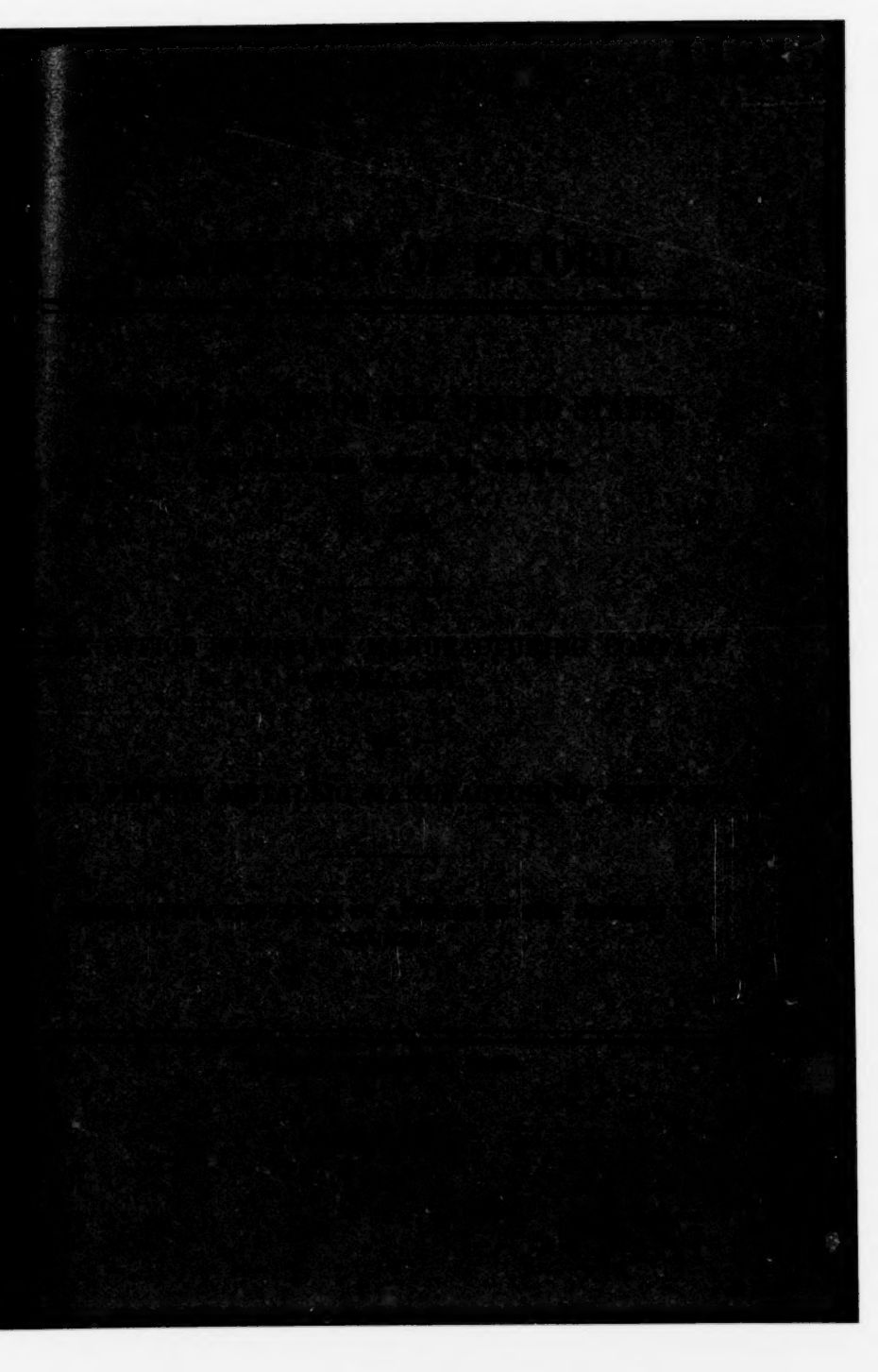


(16,812.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1898.

No. 253.

THE OFFICE SPECIALTY MANUFACTURING COMPANY, APPELLANT,

vs.

THE FENTON METALLIC MANUFACTURING COMPANY.

APPEAL FROM THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

INDEX.

	Page.
Caption	1
Transcript from supreme court of the District of Columbia	1
Caption	1
Amended bill	1
Answer	6
Replication	10
Evidence for complainant	10
Testimony of Frank L. Freeman	10
James W. Hine	31
F. L. Freeman (recalled)	42
James Lawlor	48
W. C. Burroughs	49

JUDD & DETWEILER, PRINTERS, WASHINGTON, D. C., AUGUST 31, 1898.

Page.
Evidence for defendants ... 50
Testimony of Major Romeyn Jewell ... 50
William W. Dudley ... 70
William C. Dodge ... 72
Major Romeyn Jewell (recalled) ... 78
Charles E. Birckhead ... 80
Exhibit M. R. J. No. 2—Affidavit of E. A. Richey ... 81
Complainant's Exhibit Office Specialty Manufacturing Co. Diagram ... 82
Defendants' Exhibit File-wrapper and Contents in the Matter of Letters Patent to H. J. Hoffman, No. 450,124 ... 82
Petition of H. J. Hoffman ... 82
Specification of H. J. Hoffman ... 83
Oath of H. J. Hoffman ... 86
Office letter, February 26, 1887 ... 87
Amendment ... 87
Office letter, January 13, 1888 ... 89
Amendment ... 89
Office letter, October 29, 1888 ... 90
Letter to office (power of attorney) ... 90
Letter to office, February 14, 1889 ... 91
Office letter, February 26, 1889 ... 92
Amendment ... 92
Office letter, April 16, 1889 ... 92
Interference letter, April 27, 1889 ... 93
Office letter, July 15, 1889 ... 93
Amendment ... 94
Amendment ... 95
Interference letter, October 16, 1889 ... 95
Interference letter, October 18, 1889 ... 96
Amendment ... 97
Office letter, March 18, 1891 ... 97
Amendment ... 98
Letter to office, March 16, 1891 ... 99
Office letter, March 21, 1891 ... 99
Examiner's book and contents ... 100
Drawing (No. 450,124) ... 101
Specification (No. 450,124) ... 101
Complainant's exhibits ... 103
Exhibit C—Decision of examiner of interferences, interference No. 13973 ... 103
D—Decision of examiners-in-chief ... 106
E—Decision of Commissioner of Patents, interference No. 13973 ... 109
File-wrapper and contents In the matter of the letters patent granted Jewell and Yawman, No. 557,392 ... 110
Petition of Jewell and Yawman ... 110
Specification of Jewell and Yawman ... 111
Oath of Jewell and Yawman ... 114
Letter to office ... 115
Supplemental oath of Jewell and Yawman ... 115
Office letter, January 23, 1892 ... 116
Letter to office ... 117

Page.
Amendment ... 118
Office letter, February 12, 1894 ... 118
Office letter, October 21, 1895 ... 119
Power of attorney ... 119
Amendment ... 120
Office letter, February 10, 1896 ... 121
Amendment ... 122
Office letter, March 10, 1896 ... 122
Examiner's book and contents ... 124
Drawing, No. 557,392 ... 125
Specification, No. 557,392 ... 126
Copy of drawings (2), Jewell and Yawman application. 127
File-wrapper and contents In the matter of the application of Jewell and Yawman, No. 290,122 ... 127
Petition, &c., of Jewell and Yawman ... 127
Specification of Jewell and Yawman ... 128
Oath of Jewell and Yawman ... 131
Office letter, January 7, 1889 ... 131
Amendment ... 132
Letter to office ... 132
Office letter ... 133
Amendment ... 133
Office letter ... 133
Letter to office ... 133
Interference letter, June 24, 1889 ... 134
Drawing—serial No., 290,122 ... 135
Letter to office ... 135
Office letter, September 14, 1889 ... 135
Letter to office ... 135
Interference letter, October 16, 1889 ... 135
Office letter, March 18, 1891 ... 136
Examiner's book and contents ... 137
Complainant's Exhibit A ... 138
Specification of H. J. Hoffman, No. 450,124 ... 139
Drawing ... 141
Stipulation as to demurrer, with endorsement ... 142
Drawing, Harris patent, No. 107,042 ... 143
Specification, No. 107,042 ... 144
Drawing, Boone patent, No. 182,157 ... 145
Specification, Boone patent, No. 182,157 ... 146
Drawing, Wolfe patent, No. 220,265 ... 147
Specification, Wolfe patent, No. 220,265 ... 148
Drawing, Conant patent, No. 316,241 ... 148
Specification, Conant patent, No. 316,241 ... 150
Drawings (2), Adams patent, No. 338,459 ... 152
Specification, Adams patent, No. 338,459 ... 152
Drawing, Hoffman patent, No. 437,833 ... 153
Specification, Hoffman patent, No. 437,833 ... 154
Drawing, Jewell and Yawman patent, No. 557,392 ... 156
Specification, Jewell and Yawman patent, No. 557,392 ... 157
Interlocutory decree granting injunction and referring cause to auditor, &c ... 158

	Page.
Testimony taken before auditor	159
Complainant's Exhibit Hansman's Sketch	159
Proceedings before auditor (preliminary)	160
Testimony of Carl F. Lomb	162
Stipulation as to testimony of C. F. Lomb	180
Schedule of price of roller shelves in cases	181
Testimony of James W. Hine	184
Carl F. Lomb (recalled)	196
Alexander S. Steuart	201
James W. Hine	219
Stipulation as to testimony of C. F. Lomb	228
Stipulation as to testimony of James W. Hine	229
Notice of motion to produce books, &c	230
Motion to produce books, &c	231
Order of auditor on motion to produce books, &c	231
Stipulation of counsel to extend time for showing	232
Affidavit of Carl F. Lomb	232
Exhibits A, B, C, accompanying affidavit of C. F. Lomb (drawing)	233
Statement of Office Specialty Mfg. Co.	234
Notice of motion of Metallic Mfg. Co. for additional statement	236
Motion of Metallic Mfg. Co. for additional statement	236
Drawing	237
Exhibit "Shelves in Cases," W. B. H.—Tabulated statement	238
Exhibit "Shelves without Cases," W. B. H.—Tabulated statement	279
Plaintiff's Exhibit Hine Drawing	282
Report of auditor	283
Schedule A—Account of prices received by defendant from sale of roller shelves described in the following schedules in combination with cases and the cost of manufacture	294
B—Account of profits realized by defendant from the sale of roller shelves of the form and description illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, figure 17	295
C—Account of profits realized by defendant from the sale of roller shelves of the form and description illustrated in Exhibit "Hansmann's Sketch"	296
D—Account of profits realized by the defendant from the sale of roller shelves designated as "New No. 4 roller shelf"	296
Exceptions to auditor's report	296
Order sustaining in part and overruling in part exceptions to auditor's report	298
Opinion of Justice Cox	299
Final decree	300
Petition for appeal	301
Assignment of errors, etc., by defendant, Office Specialty Manufacturing Co.	301
Citation to plaintiff	303
Allowance of appeal by plaintiff	304
Allowance of notice of appeal and waiver of citation	304
Order extending time within which to complete and file transcript	305

	Page.
Order for preparation of transcript	305
Order extending time for producing and filing transcript	307
Clerk's certificate	307
Argument	307
Opinion	308
Final decree	308
Order allowing appeal	318
Bond on appeal	318
Citation and service	319
Assignment of errors	320
Clerk's certificate	321
	325

In the Court of Appeals of the District of Columbia

FENTON METALLIC MANUFACTURING COMPANY, Appellant,
vs.
THE OFFICE SPECIALTY MANUFACTURING COMPANY. } No. 726.

THE OFFICE SPECIALTY MANUFACTURING COMPANY, Appellant,
vs.
FENTON METALLIC MANUFACTURING COMPANY. } No. 727.

a Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
CHARLES E. BIRCKHEAD *et al.* } No. 13793. In Equity.

UNITED STATES OF AMERICA, *District of Columbia,* } *ss:*

Be it remembered that in the supreme court of the District of Columbia, at the city of Washington, in said District, at the times hereinafter mentioned, the following papers were filed and proceedings had in the above-entitled cause, to wit:

1 *Amended Bill.*

Filed April 11, 1892.

In the Supreme Court of the District of Columbia, the 24th Day of February, 1892.

FENTON METALLIC MANUFACTURING COMPANY, Plaintiff,
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO., Defendants. } In Equity. #13793.

To the supreme court of the District of Columbia, holding an equity court:

The plaintiff states as follows:

1. It, the Fenton Metallic Manufacturing Company, is a corporation organized and existing under the laws of the State of New York and having its principal place of business at Jamestown, in said State, and brings this its bill of complaint in its own right.

2. The defendant Charles E. Birckhead is a citizen of the United States and a resident of the District of Columbia, and the defendant The Office Specialty Manufacturing Company is a corporation under the laws of the State of New York, having its principal place of business in Rochester, in said State, and an office where it transacts business in the city of Washington, District of Columbia, and these defendants are sued in this action severally and jointly.

2 3. That, as plaintiff is informed and believes, prior to the 12th day of February, 1887, one Horace J. Hoffman, then of Milwaukee, in the State of Wisconsin, a citizen of the United States, was the first and original inventor of a certain new and useful improvement in storage cases for books, and that the said invention was not known or used by others in this country, and was not patented nor described in any printed publication in this or any foreign country before his invention or discovery thereof, and was not in public use or on sale for more than two years prior to his application for letters patent therefor.

4. And plaintiff further shows that said Hoffman, so being the inventor of said improvements, made due application in writing to the Commissioner of Patents of the United States for the grant of letters patent for said invention and paid into the Treasury of the United States the fees required by law; which said application for letters patent was completed in due form according to law and was filed in the United States Patent Office February 12th, 1887, and was indorsed and designated by the Commissioner of Patents with the serial No. 227,363.

5. And plaintiff further shows unto your honors that after the making of the application for letters patent as aforesaid, to wit, on or about the 5th day of November, 1888, the said H. J. Hoffman, by an instrument in writing of that date, sold, assigned, and transferred unto R. E. Fenton, A. F. Allen Brown, and Alexis Crane, all of Chautauqua, in the State of New York, all of his, said

3 H. J. Hoffman's, right, title, and interest in and to said invention for which said application for letters patent was filed February 12, 1887, by virtue whereof said R. E. Fenton, A. F. Allen Brown, and Alexis Crane became the joint owners of said invention and of all the rights and privileges that might thereafter be granted or secured and that were intended to be granted or secured in and by said application for said letters patent and by any letters patent that might be granted thereupon; which said assignment was duly recorded in the Patent Office of the United States, in Liber Y 39, page 42, of Transfer- of Patents.

6. And plaintiff further shows unto your honors that afterwards, to wit, on or about November 20th, 1888, the said R. E. Fenton, A. F. Allen Brown, and Alexis Crane, by an assignment in writing of that date, sold, assigned, and transferred unto plaintiff, The Fenton Metallic Manufacturing Company, all of their right, title, and interest in and to said invention and application for letters patent filed in the United States Patent Office February 12, 1887, and said as-

signment was duly recorded in the Patent Office of the United States, in Liber E 39, page 336, of Transfer- of Patents.

7. And plaintiff further shows unto your honors that thereafter, to wit, on the sixteenth day of October, 1889, the Commissioner of Patents, being of the opinion that the said application of said Hoffman interfered with others, to wit, with the application of M. R. Jewell and Philip H. Yawman for letters patent for an improvement in book shelves filed November 6, 1888, gave notice to the
4 attorneys for the respective parties that there was an interference between said applications and certain claims thereof; and thereafter the parties to said interference, in accordance with the law and with the rules and practice of the Patent Office, filed the preliminary statements required by the rules, took the depositions of certain witnesses in proof of their respective claims to priority of invention, and submitted the same, together with certain exhibit models and documents, to the primary examiner, to wit, the examiner in charge of interferences, who, upon due proceedings had, proceeded to determine the question of priority of invention of the subject-matter of interferences, and thereupon, to wit, September 4th, 1890, determined the question of priority of invention in favor of said Hoffman; that thereupon said Jewell & Yawman took an appeal from the decision of the examiner in charge of interferences to the board of examiners-in-chief, who, upon due proceedings had and a consideration of the evidence, affirmed the decision of the examiner in charge of interferences, and decided the question of priority of invention in favor of said Hoffman; that thereafter said Jewell & Yawman appealed from the judgment of the said board of examiners-in-chief to the Commissioner of Patents in person, who, upon consideration of the evidence and due proceedings had, on March 7th, 1891, affirmed the decision of the examiners-in-chief and decided the question of priority of invention in favor of said Hoffman, as upon reference to certified copies of said
5 decisions, marked Exhibits C, D, E, hereto annexed, will fully appear.

8. That thereupon letters patent of the United States bearing date April 7th, 1891, and numbered 450,124 were issued according to law to plaintiff, as assignee, by mesne assignments, of said Horace J. Hoffman, upon said application for letters patent—serial No., 227,363—whereby was secured to plaintiff, its successors and assigns, for the term of seventeen (17) years from the 7th day of April, 1891, all rights secured by said letters patent since the date thereof and the full, exclusive right and liberty of making, using, and vending to others to be used the invention or improvement, a description whereof was duly delivered to the Commissioner of Patents, and a copy thereof was annexed to said letters patent No. 450,124, as required by law, and the said letters patent were issued in the name of the United States, were signed by the Secretary of the Interior, countersigned by the Commissioner of Patents, and sealed with the seal of the Patent Office in due form of law, as will appear from an inspection of the said letters patent, a duly certified copy of which is hereunto annexed and marked Exhibit A.

9. That the defendants The Office Specialty Manufacturing Company, a corporation under the laws of the State of New York, was privy to the aforesaid interference proceedings in the Patent Office, as the assignee, through mesne assignments, of said Jewell and Yawman, and, with said Jewell & Yawman, were represented by counsel at the hearing before the aforesaid tribunals of the Patent Office, and the Fenton Metallic Manufacturing Company, as assignee,
6 by mesne assignments, of said Hoffman, with said Hoffman, were also represented by counsel before said tribunals.

10. And plaintiff further shows that it was decided by the various tribunals of the Patent Office, whose decisions have been hereinbefore cited, that the applications of said Hoffman and said Jewell & Yawman were for the same invention, and that said Hoffman was the first inventor of the matter claimed by the respective parties and set forth in the declaration of interferences, as by duly certified copy of the said declaration of interferences, annexed hereto and marked Exhibits B, B′, and of said decisions, annexed hereto and marked Exhibits C, D, and E, will fully appear.

11. And plaintiff further shows unto your honors that it is engaged in the manufacture of metallic shelvings, which is carried on by the use of the invention recited in the said letters patent, and that it has incurred great expense in adapting the said invention to the purposes of holding and storing books; that said invention has been and is of great benefit, importance, and advantage, and that it has for more than three years constructed and sold extensively shelves containing the invention recited and claimed in said letters patent in all parts of the United States and Territories; that the demand therefor has been and is very large, and that such sales have been to the great advantage and profit of plaintiff.

12. And plaintiff further shows unto your honors that, so far as it has been able to ascertain, the public, since the grant of
7 said letters patent, has at all times acknowledged and acquiesced in the aforesaid rights of plaintiff, and that there has never been a case of infringement of said letters patent, nor does plaintiff believe that there has been any unlicensed use of said invention otherwise than as hereinafter stated.

13. And plaintiff further shows unto your honors that but for the unlawful acts of the defendants, as hereinafter set forth, plaintiff would have enjoyed exclusive possession of all rights arising from and under said letters patent, and plaintiff'- profits and advantages arising from the practice of the said invention would be and by right ought to be much larger than they now are.

14. And plaintiff further shows unto your honors that it never has at any time acquiesced in the infringement of the said letters patent No. 450,124: has always asserted the exclusive right in and to the invention to which its said letters patent relate.

15. Yet the defendants, well knowing the premises and rights of plaintiff, but contriving and conspiring to injure plaintiff and to deprive it of the benefit of that exclusive right which under the said letters patent it was and is entitled to enjoy, and before the bringing of this suit, without license or allowance of plaintiff and

in violation of the rights of plaintiff and in infringement of said letters patent, did, in the city of Washington, the District of Columbia, and elsewhere in the United States, unlawfully and wrongfully sell and offer for sale, make, construct, build, or use the in-
8 vention or improvement covered by the said letters patent No. 450,124. as aforesaid, and continues to sell and offer for sale or to make, consruct, build, and use the said invention and threatens to continue so to do, and that defendants' acts and doings are in violation of the rights secured to plaintiff by the grant of the said letters patent and are causing and will cause it irreparable loss and damage.

16. And plaintiff further shows on information and belief that the defendant C. E. Birckhead is an agent of said Office Specialty Manufacturing Company and conducts its business in the city of Washington, District of Columbia; that said Birckhead was informed of the above recited proceedings in the Patent Office and of the judgment in favor of said Hoffman, yet said Birckhead wilfully infringed and continues to infringe the rights of plaintiff to its irreparable loss and damage by using and offering for sale in the office of said Office Specialty Manufacturing Company, in said District, and for his and its benefit and for the purpose of selling as its agent roller book shelves constituting the invention of said Hoffman as aforesaid.

17. To the end, therefore, that the defendants may, if they can, show why plaintiff should not have the relief herein prayed and may, upon their several and respective knowledge, information, and belief, full, true, direct, and perfect answer make to the premises and to all matters hereinbefore stated and charged, but not under oath, which is hereby expressly waived, and that they may be compelled to account for and pay over to plaintiff all the gains
9 and profits by them acquired and the amount of damages sustained by plaintiff from the aforesaid acts of the defendants, together with such increase upon actual damages as to this honorable court shall be meet and just, in accordance with the provisions of law relating thereto, and that said defendants may be decreed to pay the costs of this suit, and that plaintiff may have such further and other relief in the premises as the circumstances of the case may require and to this honorable court shall seem meet and just—

18. May it please your honors to grant unto plaintiff the writ of injunction, as well preliminary and provisional as perpetual, issuing out of and under the seal of this honorable court, enjoining said defendants, Charles E. Birckhead and The Office Specialty Manufacturing Company, their servants, attorneys, workmen, employees, and representatives, and each of them, both *pendente lite* and perpetually, from directly or indirectly constructing, using, or vending, or offering for sale, or in any manner counterfeiting or imitating said patented invention or improvement and in anywise infringing the rights of plaintiff or causing or permitting the same to be done under the said letters patent No. 450,124.

19. And now may it please your honors to grant unto plaintiff in:

due form the writ of *subpœna respondendum* issuing out of your honorable court and directed to the said defendants, said Charles E. Birckhead and said Office Specialty Manufacturing Company, commanding them on a certain day to appear at this honorable court, then and there to answer all in the premises and to stand to and abide by such further orders, direction, and decree in the premises as may be made against them.

10 *Joint and Several Answer of the Defendants.*

Filed April 23, 1892.

In the Supreme Court of the District of Columbia, the 23rd Day of April, 1892. In Equity.

FENTON METALLIC MFG. CO.
vs.
CHAS. E. BIRCKHEAD and THE OFFICE SPECIALTY MFG. CO. } Eq. No. 13793, Doc. 33.

Joint and several answer of Charles E. Birckhead and The Office Specialty Manufacturing Company to the bill of complaint filed herein.

For answer to the above bill, or so much thereof as they are advised it is necessary and material for them to answer, the defendants say:

1. They admit the allegations of the first paragraph.
2. They admit the allegations of the second paragraph.
3. They deny that Horace J. Hoffman was the first and original inventor of the new and useful improvement in storage cases for books referred to in the third paragraph, and they also deny that the said invention was not know- or used by others in this country and was not patented nor described, &c., as in said paragraph alleged.

11 4. They admit that said Hoffman made application for letters patent for a certain invention, which was filed and designated as in the fourth paragraph alleged.

5. They are content to admit the allegations of the fifth paragraph.

6. They are content to admit the allegations of the sixth paragraph.

7. They admit that an interference was declared by the U. S. Patent Office on the 16th day of October, 1889, between the application of said Hoffman and the application of M. R. Jewel and Philip H. Yawman "for letters patent for an improvement in book shelves, filed November 6th, 1888;" and they admit, further, that certain proceedings, substantially as set forth in said transaction, were had in said Patent Office, and that the Exhibits "C," "D," and "E" to said bill are copies of the sundry decisions made by the examiner in charge of interferences, the board of examiners-in-chief, and the Commissioner of Patents.

8. They admit the issue of the letters patent referred to in the eighth paragraph.

9. They are content to admit the allegations of the ninth paragraph.

10. They deny that the application of said Hoffman and the said Jewel and Yawman were for the same invention, or that the said Hoffman was the first inventor of the matter claimed by the respective parties, &c.

11. They demand strict proof of the allegations of the eleventh paragraph, neither admitting nor denying the same.

12 12. They deny that the public since the grant of said letters patent numbered 450,124 to Hoffman has at all times acknowledged and acquiesced in the aforesaid rights of the plaintiff. They further deny "that there has never been a case of infringement of said letters patent nor any unlicensed use of said invention otherwise than" as stated later in said bill.

13. They neither admit nor deny that the plaintiff but for the acts of the defendants later set out in said bill would not have enjoyed "exclusive possession of all rights arising from and under said letters patent," and they demand strict proof that the plaintiff's "profits and advantages arising from the practice of the said invention would be and by right ought to be much larger than they now are."

14. On information and belief they deny the allegations of the fourteenth paragraph and demand strict proof thereof.

15. They deny the allegations of the fifteenth paragraph; and as matter of law they specially deny that it is possible for a corporation which acts through its officers and agents to conspire and contrive with said officers and agents or any of them to do any act whatever, and they claim the same advantage of this denial as if the allegations of said bill in respect thereof had been specially demurred to. They further deny that the acts of the defendants are in violation of any rights secured to the plaintiff by the grant of said letters patent, and that "they, the said defendants, are causing and will cause it (the plaintiff) irreparable loss and damage" by reason of the acts or doings on their part in said paragraph referred to.

13 16. They and each of them deny that the defendant C. E. Birckhead, who is an agent of said Office Specialty Manufacturing Company in the city of Washington, District of Columbia, conducting its business here, "has wilfully infringed and continues to infringe the rights of plaintiff, to its irreparable loss and damage, by using and offering for sale" roller book shelves constituting the invention of said Hoffman as aforesaid.

17. They deny that the plaintiff in and by its said bill has made such a case as entitles it to the relief in said bill prayed.

18 and 19. To the eighteenth and nineteenth paragraphs, which are prayers for process, &c., they are advised that it is not necessary for them to respond.

20. And, further answering, the said defendants say that they are advised that the plaintiff has not in and by its bill made or stated

such a case as entitled it to relief in a court of equity, in these, among other, things: That it has not called for any discovery; that it has not shown or alleged that the defendants are not pecuniarily responsible; that it has not shown that it has not a complete and adequate remedy at law for or in respect of any injuries alleged to have been sustained by it from the defendants, either or both of them; that it has not based any prayer to relief upon the prevention of multiplicity of suits, but, on the contrary, has shown that the
14 defendants, if infringers, are the only infringers of plaintiff's said Hoffman patent; and they claim the same advantage of these objections as if they had been set forth by general or special demurrer.

21. And, further answering, they say that if the plaintiff's said patent is valid—which they do not admit—it is by its terms and by the action of the Patent Office, as set forth in the exhibits filed with said bill, confined to a particular and precise form which the defendants have not in anywise infringed or used.

22. And, further answering, they say that a hand hold for grasping books upon or between shelves is old and incapable of being patented for want of novelty, and that the application of an old and well-known device for placing books on shelving or removing them therefrom, combined with shelving that in itself is old, lacks novelty and invention, subserves no new function, and is merely a mechanical adaptation requiring simply the skill or ordinary workmen, and that whatever there may be in the Hoffman patent must, in view of the art and of the laws governing the issuing of patent, be confined to the precise and exact form and application of the device shown, and that roller shelving for books is old and has been a long time in use and is incapable of being patented for want of novelty, and that the application or the combination of two old and well-known devices which does not result in the production of a new function or create a new use do- not form the subject of a patent, and that the combination of the two devises shown in the claim of said Hoffman patent sued on involves no such invention as is required for a patent, but is at the best an application or combination involving nothing but the exercise of ordinary mechanical skill.

15 23. And, further answering, they say that the subject-matter of said claim of the Hoffman patent sued upon has been fully anticipated by the patent granted to A. Lemuel Adams March 23, 1886, numbered 338,459, for improvement in rollers and extension axles; and the patent granted to John L. Boone on September 12, 1876, numbered 182,157, for improvement in book shelves; and the patent granted to Marion P. Wolfe October 7, 1879, numbered 220,265, for improvement in book-cases; and the patent issued to Horace J. Hoffman January 8, 1884, numbered 291,513, for adjustable shelving; and the patent granted to Walter N. Conant April 21, 1885, numbered 316,241, for roller-shelf book-case; and the patent granted to A. J. Judge & T. F. Farrelly August 12, 1884, numbered 303,291, for book-case; and the patent granted to C. B. Taylor December 15, 1885, numbered 332,627, for book shelf; and

the patent granted to Henry H. Olds and Charles W. Olds July 20, 1886, numbered 345,986, for book-case; and the patent granted to Samuel H. Harris September 6, 1870, numbered 107,042, for improvement in shelf cases for books; all of which are U. S. patents, and copies of the specifications and drawings thereof are filed herewith as part of this answer as Exhibits A to *I*, inclusive.

24. And, further answering, they say that certain features claimed to be covered by the Hoffman patent sued upon are to be found in the following, among many other, U. S. patents, to wit: The patent granted to S. T. Wellman May 15, 1883, numbered 277,815, for rolling mill; and the patent granted to S. T. Williams September 11, 1883, numbered 284,700, for rolling mill; and the patent granted to John Collins August 24, 1880, numbered 231,539, for
16 wagon for gaseous liquid fountains; and the patent granted to John Collins September 7, 1880, numbered 232,002, for wagon for gaseous liquid fountains; and the patent granted to Owen Kinsley April 1, 1884, numbered 296,019, for lumber wagon, and copies of the specifications and drawings thereof are filed herewith as part of this answer as Exhibits K to O (inc.).

25. And, further answering, they say that the following U. S. patents, among others, embody features shown and claimed in the Hoffman patent sued upon, to wit: The patent granted to H. T. Reed March 22, 1887, numbered 359,691, for shelving; and the patent granted to J. D. Edwards November 4, 1890, numbered 439,869, for roller book shelf; and the patent granted to J. W. Hine September 1, 1891, numbered 458,902, for book rack, and copies of the specifications and drawings thereof are filed herewith as part of this answer as Exhibits P to R, inc.

26. And, further answering, they refer to the file-wrappers and contents in the matter of the applications of W. N. Conant (for patent 316,241), H. J. Hoffman (for patents 291,515 and 450,124), M. P. Wolfe (for patent 220,265), J. L. Boone (for patent 182,157), H. T. Reed (for patent 359,691), Arthur J. Judge *et al.* (for patent 303,291); copies of which have been ordered from the Patent Office, but not yet delivered, and which, when delivered, will be filed herewith as exhibits to this answer, numbered respectively — to —, as showing the holding of the Patent Office in relation to sundry features claimed and shown in the Hoffman patent sued upon herein.

17 27. And, further answering, they say that they also are informed, and so charge, that roller book shelves with a hand hold or grasp substantially like those shown in the said Hoffman patent sued upon were in use in the court-house at Richmond, Indiana, as early as the year 1873 or thereabouts, and that similar devices were in use in other places in sundry public buildings throughout the United States.

And, having fully answered, they pray to be hence dismissed, &c.

C. E. BIRCKHEAD.

Subscribed and sworn to on behalf as well of the Office Specialty

Mfg. Co. as himself, at Washington city, D. C., this 23d day of April, 1892.

MYER COHEN,
Notary Public.

[SEAL.]

R. D. MUSSEY,
P. T. DODGE, *Of Counsel.*

18 *Replication.*

Filed April 26, 1892.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MFG. CO. } In Equity. No. 13973.

The complainant hereby joins issue with the defendants.

CHARLES E. FOSTER,
Solicitor for Complainant.

April 23d, 1892.

19 *Complainant's Testimony.*

Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO. } In Equity. No. 13793.

CITY OF WASHINGTON, *District of Columbia,* } *ss:*

On the 17th day of March, 1892, appears FRANK L. FREEMAN, who being duly sworn according to law, says:

I am of lawful age, and a resident of the city of Washington, District of Columbia, and an attorney-at-law, and expert in patent causes.

In 1872 I was appointed a clerk in the U. S. Patent Office, and remained in that office occupying different positions until 1883, and during this time I was employed almost constantly in the examination of inventions and applications for patents therefor, and in comparing one invention with another construing specifications and claims, and passing judgment upon the novelty and patentability of different inventions. In 1875 I was appointed principal examiner in the Patent Office, and had charge of a class of inventions including book-binding, printing, office stationery, bill files, file-cases, and the like class of inventions, and I became quite familiar with the state of the art up to and including that period
20 until the year 1880, when I took charge of the class of electricity in the U. S. Patent Office, which I retained until my resignation in 1883.

Since my resignation from the Patent Office I have been practicing my profession continuously, and devoted myself especially to expert work, and have been almost constantly engaged in comparing various inventions and patents therefor, and passing judgment, and giving opinions as to the scope and validity of the patents, as well as preparing affidavits and giving testimony in patent causes pending before the U. S. courts.

I have read and I understand the letters patent issued to Horace J. Hoffman on April 7, 1891, No. 450,124.

Prior to the date of the Hoffman application, to wit: Feb. 12, 1887, it was common to use what were called roller shelves, the same consisting of frames or supports and longitudinal parallel rollers which extended the entire length of the shelf and served to reduce friction in putting books upon and withdrawing them from the shelf. One form of such shelves is shown in Complainant's Exhibit Office Specialty Manufacturing Company's Catalogue on page 14 thereof, figure 16. The use of such shelves was, and is, however, limited because of certain defects; for instance, one of the principal defects is the liability of the person placing the book upon the shelf to have the fingers pinched between the book and the front roller in placing the book on the shelf. With light small books, this of course was not a matter of special importance, and the shelves can be used with such books, but the class of books for which such shelves is especially adapted is heavy books such as are used in keeping Government records, weighing, in many instances, from ten to twenty-six or even thirty pounds, and quite large, and with such books the liability to injure the fingers in putting them on and taking them from the shelf is very great.

Further, in putting such books upon ordinary shelves, the edges or corners of the shelves cut, abrade and injure the bindings
21 of the books, while the long rollers sag and bend under the weight, especially when the books are shorter than the shelves.

The specification of said patents sets forth that the object of the invention is to facilitate the handling and prevent the abrasion of heavy books, and it describes in detail the construction of a shelf and means for securing it to a metallic case which may be briefly summarized as follows:

The shelf consists of a rack or frame of suitable construction and a series of rollers mounted upon the frame, which rollers may be of "iron, wood or any suitable material." The specification states:

"This metallic frame is *preferably* formed of heavy band iron," from which I understand that the construction shown is a preferable and not an essential one. Two sets of rollers are shown as arranged upon the frame, the upper set n, n, n, being for the purpose of supporting the book to be placed upon the shelf, out of contact with the frame, and the lower set n', n', projecting below the frame for the purpose of preventing the book on the shelf next below from rubbing against the frame when tilted in removing from or inserting it into the case.

The specification sets forth that the middle portion of the frame

"is bent inwardly at c^4, thus *exposing a portion of the book* to the grasp and facilitating its removal from the case."

I understand from this that by so constructing the frame, there is formed a "hand hole" or recess into which the fingers may extend without coming in contact with the frame when the book is grasped to remove it from the shelf or when it is held in the hand and placed upon the shelf. It is set forth:

"that the front rollers n, n, are set as seen in Figs. 2 and 3 in front of the cross-sections c^3, c^3, of the roller frame, and project slightly
22 in front of and above the said frame, so as to prevent contact between said frame and a book whenever the latter is inserted in or removed from the case A at any inclination to the racks B."

By this arrangement of the separated sections of the rollers in front of the frame, and of the hand hole extending back between these front-roller sections, it is possible to support the book at its front edge, however heavy it may be, and at the same time to grasp the book without contact with the frame, either in putting it upon, or removing it from the shelf. It is extremely important that the books should be so supported at the front edge, because if there was no such support, being very heavy, the bindings would soon sag down or swell at the back or bound edge of the book, and the book would lose its shape and stiffness; but by the arrangement described, it is supported as well, to all practical purposes, as if it lay upon a flat shelf, while at the same time there is no liability of injuring the book in putting it upon or removing it from the shelf, the rollers so facilitating the operation that the books can be readily moved back and forth, and there is no liability of the hand coming in contact with any portion of the frame.

The first claim of the said patent calls for a storage case for books and a combination in such a storage case of a supporting rack or shelf, composed of metallic strips and having a re-entrant bend or recess in its front edge with the rollers journalled in the rack projecting above and in front of the same on each side of the bend or recess.

The second claim, however, is not in combination with a storage case, but is for the book shelf itself, and for the combination in such a book shelf of a supporting frame, with no specific limitation as to its character, a series of horizontal rollers, and with the statement that the front roller must be in two separate sections, and that the intermediate part of the frame shall be carried back to permit the admission of the hand between the roller sections.

23 I have examined the catalogue marked "Complainant's Exhibit Office Specialty Manufacturing Co. Catalogue," and I have compared the shelf illustrated in perspective on page 14 of said catalogue, and marked Fig. 17, and also illustrated on page 15, in connection with a case, and in my opinion the shelf of the said Office Specialty Manufacturing Company's catalogue is substantially the shelf illustrated and claimed in the second claim of the said letters patent No. 450,124 to Hoffman. I find that the said shelf of the said catalogue consists of a frame, which is described in the catalogue as follows:

"The shelf frame is made of band steel, firmly riveted together and double braced, making a remarkably strong shelf,"
and of rollers which are designated in the catalogue as back, centre and front rollers, and it is stated that:
"the two short rollers in front are divided by a guide-support in half-oval form, leaving a space for book hold."

The said shelf of the catalogue, therefore, consists of the frame and of rollers, the two front rollers being shorter than the others and separated, and the frame having a place at the centre which is open so that the hand can pass in to grasp a book or place it upon the shelf.

Comparing the shelf of the said catalogue with claim 2 of the Hoffman patent, I find in the shelf of the catalogue the same combination of parts set forth in said claim. Thus, the said claim calls for a "book shelf" and that illustrated in said catalogue is a book shelf. It calls for a combination of 1st; "a supporting frame," and I find in the catalogue shelf a supporting frame; 2d, the claim calls for "a series of horizontal rollers," and I find in the catalogue shelf a series of horizontal rollers; 3d, the claim calls for "the front roller in two separated sections," and I find in the catalogue shelf a front roller in two separated sections; 4th, the claim calls for "the
24 intermediate part of the frame being carried back to permit the admission of the hand between the said roller sections,"
and I find in said catalogue shelf that the intermediate part of the frame is carried back to permit the admission of the hand between the said roller sections, and that this purpose is substantially asserted in the descriptive portion of the catalogue.

Comparing the frame of the catalogue with that of the structure shown in the Hoffman patent, and especially at the forward part of the frame, I find that in the Hoffman patent the forward parts consists of the cross-bars or "sections" *c3*, *c3*, and the part termed in the specification the "middle U-shaped section," which consists of a bar bent back at the centre to form a U-shaped part or a recess to admit the hand. In the structure of the catalogue, the front part of the frame consists of two inclined bars together constituting a bent bar extending completely across the frame and an intermediate U-shaped portion which is riveted to the two bent portions, but bent back forming a recess to admit the hand. So far, however, as details of construction differ in the two shelves, I do not regard them as material, because in each case there is a central portion bent back or constructed to permit the hand to pass to the rear of the rollers and two separated rollers supported at the front, and the result is the same in each case, and that is, that the book is practically supported throughout its whole extent, and especially at the forward edge, while the hand can pass back and grasp the book without striking the frame or being injured thereby, or being pinched between the frame and the book.

I have compared the structure of said catalogue with that illustrated in Complainant's Exhibit Hansman's Sketch, and I do not see any material difference between the two. The frames are somewhat differently constructed, the hand hole or bent-back portion of

the Hansmann sketch formed by a U-shaped part of the frame is divided into two parts which are riveted in place while in the catalogue they are in one piece, but this does not alter their function, arrangement or effect in any way.

25 I further note that the front bar *b*, *b*, in the Hansmann sketch is straight, while it is bent in the construction of the catalogue, but this is not material in my opinion, because it does not alter the function or effect of the front rollers or the hand hole, or retracted portion of the frame.

Comparing the construction of the Hansman sketch with that set forth in the claims of the aforesaid patent to Hoffman, I find that it has the elements of the 2d claim. Thus referring to claim 2 and to the Hansman sketch, the said sketch shows "a book shelf," and it shows the combination of "a supporting frame," "a series of horizontal rollers" and "a front roller in two separated sections," and "the intermediate part of the frame carried back to permit the admission of the hand between the roller sections."

In each of the structures shown in Exhibit Hansmann Sketch, in the Exhibit Catalogue, and in the Hoffman patent, there are the same general features so far as the hand hole and the support and the forward rollers are concerned. That is, in each there is a frame, with two separated rollers at the front, in each that portion of the frame between the two rollers is so constructed that the hand can pass back of the rollers in grasping the book, or in placing it upon the shelf; while the differences between the shelves are such differences in the construction of the frame as are incidental to the manufacture of almost any article by different persons for different situations.

I was one of the attorneys for the Fenton Company when the interference between Hoffman and Jewell & Yawman was conducted in the United States Patent Office and the exhibits produced on behalf of Hoffman as embodying his inventions in different forms showed greater differences of construction of his improved shelf than those which exist between the structure of the patent and of the Exhibit Shelf and of Exhibit Catalogue.

26 There is no limitation in claim 2 of said Hoffman patent calling for a specific number of rollers, nor any special mode of constructing the shelf, except that it must be carried back, which I understood to mean back of the position or line of the roller section, and I am, therefore, of opinion that each of the shelves, shown in figure 17 of the Exhibit Catalogue, and in Exhibit Hansmann Sketch, has in it the combination of elements set forth in claim 2 of the said Hoffman patent.

Sworn and subscribed to before me this 17th of March, 1892.

——— ———.

27 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO. } Equity. 13793, Doc. 33.

WASHINGTON, D. C., *April* 25, 1892—2 o'clock p. m.

Met pursuant to notice at the office of R. D. Mussey, Esq., 470 Louisiana avenue.

Present on behalf of the complainant, Mr. Mussey; on behalf of the defendant-, Mr. Foster.

Whereupon, FRANK L. FREEMAN, a witness of lawful age, called by and on behalf of the complainant, having been duly sworn, is

Cross-examined by Mr. MUSSEY:

1 X Q. Treating the affidavit made by you as testimony given on behalf of the claimant, I desire now to cross-examine you somewhat in relation to it. Mr. Freeman, you stated in your direct testimony that you had charge at one time in the Patent Office as principal examiner of a class of inventions including book-binding, printing, office stationery, bill files, file-cases and the like. Did you remain in that until you took charge of the electrical department?

A. I did.

2 X Q. During that period did you have before you for investigation any application for roller shelves for book-cases that you remember of?

28 A. I cannot remember any specific case, although I know there were patents showing roller shelves, and possibly some applications were made at that time on which I had to pass judgment.

3 X Q. Prior to 1880?

A. But I do not recall whether there were or not.

4 X Q. Do you recall the names of any of the patents that you state existed on roller shelves prior to the year 1880?

A. I do not. I make no attempt to remember the names of patents, and probably if I made such an attempt without having my attention especially called to it, I could not testify in answer to such a specific question.

5 X Q. Do I understand you, then, to say that prior to that time there were roller shelves for book-cases and the like on the market or in use.

A. They were used in the Patent Office prior to that time.

6 X Q. For your portfolios?

A. Yes.

7 X Q. These roller shelves that were used for your portfolios were there when you went into the office?

A. Yes; and they were thrown out shortly after; their use was dispensed with.

8 X Q. What was adopted in their place, if you remember?

A. Pivoted sliding drawers.

9 X Q. You refer in your testimony to figure 16 of the Office Specialty Manufacturing Company catalogue, stating that one form of such shelves is shown there. I notice in looking at this figure that there are what might be called clips or sleeves upon the bar immediately in the rear of the front roller. Do you remember to have seen them except in that catalogue or on the shelves constructed in accordance with that figure?

Mr. FOSTER: The question is objected to as immaterial.

A. I have never seen such specific clips except as illus-
29 trated in the application of Jewell and Yawman, which was involved in interference with the application of Hoffman, forming the basis of the complainant's patent in this cause.

10 Q. Referring to the shelves shown in figure 16, you state in your direct testimony that the person placing the book upon the shelf is liable to have his fingers pinched between the book and the front roller in placing the book on the shelf. Have you ever had any personal experience of that kind?

A. Yes.

11 X Q. You also state that in putting such books upon ordinary shelves, the edges or corners of the shelves cut, abrade and injure the bindings of the books. To what extent have you noticed that?

A. To a very considerable extent, more especially in connection with the large books in the library of the United States Patent Office.

12 X Q. In the case of the shelving for the large books in the United States Patent Office referred to, is the roller brought to the extreme front of the shelving, so that it, as a matter of fact, projects, as shown in this figure, slightly over the end of the frame?

Mr. FOSTER: Objected to as assuming what the witness has not said.

A. In the Patent Office, according to my best recollection, the rollers, as used in connection with their portfolios, did not extend beyond the front of the case. It is possible they might have projected slightly beyond, at least as much as indicated in figure 16 in the catalogue.

13 X Q. As to whether they did so extend or not, I understand you are not positive?

A. I cannot state positively whether they did extend slightly beyond the front of the case or shelf, or whether they were practically flush therewith. I should think it was very likely that some of them might have projected slightly, and probably some of them were slightly in rear of the line of the shelf or case.

30 14 X Q. You have stated that you have personal experience with those Patent Office roller shelves, of getting your fingers pinched when handling big books. Can you tell whether the rollers in the cases where your fingers were pinched were flush with the end of the shelf or set somewhat back from it?

A. I do not remember any particular construction of any shelf;

as before stated, my impression is that the majority of the rollers, at least, did not extend beyond the case, but that some of them might have projected a little.

15 X Q. You also stated that the long rollers sag and bend under the weight, especially when the books are shorter than the shelves. I suppose by this last clause, you refer to the fact the shelves are deeper than the books. How is that?

A. I do not know exactly what you mean by deeper than the books. What I intended by the clause referred to was that when the books placed on the shelves flatwise they were shorter than the rollers were long, so that the weight of the book was supported principally by the central portions of the rollers, which rollers were supported at their extreme ends, these rollers would sag and bend under the weight of the books.

16 X Q. This sagging or bending of the rollers; has it ever fallen under your personal observation?

A. I cannot state positively having seen any specific instance in which a book resting on the roller shelves caused it to sag, although my recollection is that it was a common feature of the old roller portfolios used in the Patent Office. The rollers supporting said portfolios, which usually contain a large number of drawings, were subject to this fault, as the greatest weight of the portfolios was in the middle, the drawings not all being as long as the rollers supporting the portfolios.

17 X Q. Those portfolios support rollers; were they of wood or metal?

A. My recollection is that they were of wood. It seems to me there were some gas-pipe ones there, too, but I am not sure.

31 18 X Q. And wood is liable to warp, is it not?

A. Certainly.

19 X Q. Is it not a fact that in the manufacture of shelving for record and other books, the shelving is usually, if not uniformly, adapted to the size of the books to be placed upon it?

A. That would evidently be the proper way of constructing shelving for books; provided, of course, that the shelving was made for a known size book.

20 X Q. Referring now to the Hoffman patent sued upon, and which was in interference with the application of Jewell & Yawman, were you actively connected with that interference on behalf of either of the parties?

A. I cannot say that I was actively connected with the interference.

21 X Q. Or with the preparation of the application?

A. I did take more or less part in the prosecution of the interference.

22 X Q. I believe you were associated with your partner, Mr. Foster?

A. Yes. It was Mr. Foster's case, and he conducted the matters, both of the application and the interference, except what action I took in his absence, or owing to other reasons which prevented him from acting personally.

23 X Q. I notice that this application of Hoffman was filed Feb. 12, 1887, and the patent was not granted until April 7, 1891. What were the occasions of delay, if you recall?

A. The application as originally filed was subjected to, and the case passed through the usual course under certain objections, being amended in several particulars, and was finally put in interference with an application of one Seyster, and subsequently, when this was settled, it was put in interference with the application of Jewell & Yawman.

24 X Q. In this interference with Seyster, was Seyster's a patented application, or simply an application?

A. Without referring to the records, my recollection is it was an application.

32 25 X Q. It never became a patent?

A. I think not. The interference was decided in favor of Hoffman.

26 X Q. As the patent sued upon was issued to Hoffman it contained three claims. I find on referring to the record of the decision of the officers before whom the interference with Jewell & Yawman was contested, that there were at least ten claims made in this application. Do you recall whether any of these claims that appear to have been eliminated before issue contained a reference to a hand hole or grasp?

A. The application as originally filed was divided into two separate applications, one of which became the patent numbered 437,833, dated October 7, 1890, and the other the patent in suit. I may remark that the first patent issued with seven claims, which were divided out of the original application filed by Hoffman.

27 X Q. In your view, is there any essential difference between the square recess shown in Hoffman's patent of 1890 and the rounded recess shown in the patent of 1891; if so, please state it?

A. In my opinion there is no essential or practical difference.

28 X Q. Is it merely then a matter of convenience as to whether there shall be the curved recess or the straight recess?

A. As far as affording a means to grasp the book is concerned, it is not material whether the recess is curved or rectangular.

29 X Q. Hand holes or grasps on shelves are old and well known, are they not?

A. They are.

30 X Q. From your analysis given of the Hoffman patent sued upon, I understand you to say that the construction of the frames is not an essential to the patent?

A. That is correct. The specific construction of the frame constituting the shelves is not, in my opinion, material in considering the invention set forth in claim 2 of the Hoffman patent.

33 31 X Q. And the number of rollers employed is not essential?

A. I understand that it is not; and the specification of the patent sets forth this fact.

32 X Q. Referring to your testimony, page 4, you say: "Two sets of rollers are shown as arranged upon the frame," subserving cer-

tain functions, which you state. In what sense do you use the word "frame" there?

A. In the sense in which the word is used in the specification of the patent to Hoffman, which states; "B is one of the book-supporting shelves or racks, composed of a metallic frame, in which are mounted rollers for guiding and supporting the books," &c.; and in the sense that I understand the same word is used in the application of Jewell & Yawman, which was involved in interference with the application of Hoffman, in which it is stated: "To this end the invention consists in the new article of manufacture, a rigid frame, provided with a series of rollers, the whole constructed and adapted for use, substantially as hereinafter described."

33 X Q. You refer upon the same page of your testimony to two sets of rollers, an upper and lower. Are these claimed in the patent as it was issued?

Mr. FOSTER: Objected to as immaterial.

A. They were claimed in the division of this original application of Hoffman, which resulted in patent No. 437,833.

34 X Q. They are not, however, so claimed in the patent sued upon?

A. They are not made specific elements or limiting elements of the claim in suit. This claim simply calls for a series of horizontal rollers, and is not limited to the two series, one arranged in a different plane from the other.

35 X Q. Do you find any such series of rollers above and rollers below either in the application of Jewell & Yawman or the device which you say is in suit?

34 A. I do not. This feature is not involved in the claim in this suit, as I understand.

36 X Q. Am I right in apprehending your testimony as being to the purport that the particular claim involved in this suit is the second claim of patent 450,124?

A. That is as I understand it.

37 X Q. In the Jewell & Yawman application or device do the front rollers project above the frame?

A. They do.

38 X Q. How in the catalogue, referring to figure 17, which appears to be the one in controversy here?

A. Apparently they do project above the frame.

39 X Q. In the conduct of the interference of the application of Hoffman, culminating in patent 450,124, or of the interference in the Patent Office with Jewell & Yawman, did you have occasion, or have you had since, to examine the patent issued to A. Lemuel Adams, No. 338,459?

A. This patent was referred to by the examiner in objecting to the application of Hoffman as originally filed. The patent was also referred to in the interference proceedings; and I have also looked at it more particularly today, having been informed that it was set up in the answer in this suit.

40 X Q. Does not this patent show short rollers in front of the roller frame projecting above the frame?

A. I do not find in this patent any frame in the sense I understand the word "frame" has been used in the patent of Hoffman, and the application of Jewell & Yawman, as pointed out in answer to question No. 32.

The specification of this patent to Adams, 338,459, refers to the rollers, which I understand to be the subject of this question, as follows: "On one of the supports is secured by means of fastenings *a a a*, a novel-shaped spring E, which is first bent in the shape of a staple, then to the right and left, and then upward and outward, and on the outer ends of which I provide rollers *b b*, as shown in Figs. 1 and 2, which spring by its peculiar construction assists in placing a book in its proper aperture." These rollers are shown as extending in front of the case, and apparently from the drawing the rollers extend slightly above the plane of the bars connected to the support B, and which bars support the axles C carrying the rolls D, which are described as extending above the tops of the bars.

41 X Q. Your criticism is that you do not recognize such a frame as is referred to in the patent and device in controversy. Is there any essential difference between the frame shown in the Hoffman patent, 450,124, and the device into which the axles of the rollers are set, and the device shown by Adams, in his patent?

A. In my opinion, there are essential differences between the two devices.

42 X Q. Please point them out.

A. The device which constitutes the frame in the Hoffman patent and in the Jewell & Yawman application, as referred to in my previous answer, relates to a portable shelf, which is composed of suitable bars, constituting a rigid frame, which supports a series of rollers, and forming an article of manufacture complete in itself, which may be used in forming book-cases, storage cases, and the like, and which shall serve to properly support the book when placed on the frame, and furnish facilities for removing the book or putting it in place on the shelf.

The patent to Adams shows quite a different device, as I understand it, in that it is a case having fixed supports B B, upon which rests the bars A, which are made adjustable upon said supports, and which have openings for the reception of the axles supporting the rollers on their ends. It is not a frame which is an article of manufacture capable of use in the manner set forth in the patent to Hoffman, but is a structure quite different in detail, and one that could not, in my opinion, be practically used for the purposes and objects set forth in regard to the Hoffman device.

There appears to be a further distinction between the two devices, in that in the Hoffman device the intermediate part of the frame is carried back to permit the admission of the hand between the two separated front roller sections. In the Adams patent, I find no such structure of the frame. If the parts A A, B B, and the remaining portions of the device shown in the Adams pat-

ent can properly be called a frame, it is not in my opinion such a frame as is referred to in the claim of the Hoffman patent in suit, and would not be practically used as an equivalent therefor.

43 X Q. Both in the Adams patent and in the Hoffman patent, there is an exterior of some sort, enclosing the roller part of the structure, is there not?

A. As I understand the Adams patent, there is an exterior. As the patent states, it relates to book-cases; and I understand by the word "exterior" as used in the question, that it refers more particularly to the case, and this case forms an exterior or enclosure for the rolls B of the patent of Adams. In the Hoffman patent, there is a complete metallic frame, constituting a separate article of manufacture, which in itself may be applied to book-cases, or other enclosure, and which frame forms a support for the rollers, and the front portion of the frame is carried back to permit the admission of the hand between the front roller sections.

44 X Q. Leaving out of consideration, for a moment, the carrying-back feature of the frame in the Hoffman patent, is not the real distinction between the Hoffman and the Adams patent in respect of that portion of the structure which encloses the rollers, that one is rigid and the other adjustable?

A. As I understand it, neither in the structure shown in the Hoffman patent, nor in the structure shown in the Adams patent, is the part of the structure which encloses or may be said in any sense to enclose, the rollers, adjustable. The only parts so described as being adjustable in the Adams patent are the bars A A, having their ends resting upon the supports B B, so as to permit of their being moved laterally. These bars are between the two sets of rolls D D, and do not form any portion of an enclosing frame, or, as I understand the term, an enclosure for the rollers.

45 X Q. The bars in the Adams patent have to have their ends rest somewhere, don't they?

37 A. The bars A A in the Adams patent are described as resting upon the supports B B, and the ends of the bars are shown as secured to said supports.

46 X Q. Referring to figure 3 of the drawings of the Adams patent, the shaded lines against which the bars are placed represent an enclosure of some sort; do they not?

A. As I understand figure 3 of the Adams patent, the bars A A are shown with their ends resting upon the supports B B, which are shown in section lines, and these supports constitute or form a part of the book-case, the sectional contour of which is indicated by the meeting lines at the bottom and left, and the sectional lines at the top and right.

47 X Q. Would it not be impossible to apply this device of Adams to a book-case, as is contemplated by his patent, without having something to hold the ends of the bars A A?

A. As before stated, I understand that the bars A A are adjustably mounted on the supports B B, which I understand constitute a part of the book-case.

48 X Q. I suppose you have laid no stress upon the fact that the

Hoffman device is metallic, and the Adams device may be of wood, or any other material?

A. The mere fact that one device were made of metal and the other of wood, if they were alike in other respects, would not, in my opinion, be a material distinction. There are undoubtedly advantages arising from making the frame of the Hoffman patent from metal, and especially in making a frame having the characteristic features of construction which apply to the Hoffman frame, but as before stated, I should not consider, and have not considered, the fact that the Adams device may be of wood, as a distinguishing characteristic; and if his device, though made of wood, had the structural features of the Hoffman patent, in my opinion, it would be substantially the same device.

49 X Q. A hand grasp or hold is shown in the Adams patent, is it not, or what may subserve the use of the hand grasp or hold?

38 A. If by hand grasp you refer to the space between the rolls B B.

50 X Q. Which is precisely what I do refer to.

A. Which are mounted upon the spring E; the Adams patent does show a hand grasp; but it is not, in my opinion, the thing which is shown in the Hoffman patent and described and set forth more particularly in the second claim in the words "An intermediate part of the frame being carried back to permit the admission of the hand between the roller sections."

Mr. MUSSEY: The part of the answer from the word "but" is objected to as irresponsive.

By Mr. MUSSEY:

51 X Q. I was not asking for the difference between the hand grasps or holds shown by the different patents, but as to whether there was not a hand grasp or hold shown in the Adams patent, that is to say, a recess between the short front rollers which would enable the hand to be used in introducing or removing a book?

Mr. FOSTER: Objected to as assuming that in the use of the Adams structure a book must be grasped at the center, as no evidence has yet been put in this case to show that the hand would pass between the rollers in the Adams structure when grasping the book.

Mr. MUSSEY: To which objection Mr. Mussey responds that no evidence has yet been introduced in this case to show that anybody, in putting a book on a shelf, or in removing it from a shelf, would necessarily resort to a hand hold or hand grasp.

The taking of these depositions was thereupon adjourned until Tuesday, April 26, 1892, at 10 o'clock a. m.

39 WASHINGTON, D. C., *April* 26, 1892—10 o'clock a. m.

Met pursuant to adjournment at the office of R. D. Mussey, Esq., 470 Louisiana avenue.

Present on behalf of the complainant, Mr. Foster.

Present on behalf of the defendant, Mr. Mussey.

Whereupon, cross-examination of witness FRANK H. FREEMAN continued:

By Mr. MUSSEY:

51½ X Q. The pending question when we adjourned yesterday was: Is not a hand grasp or hold found in the Adams patent, that is to say, a recess between the short front rollers, which would enable the hand to be used in introducing or removing a book?

A. As stated in my previous answer, there is a space or recess between the rolls *b b* in the Adams patent; but in my opinion this would not constitute a substantial equivalent of the frame of the Hoffman patent, which is carried back to permit the admission of the hand between the roller sections, which would enable the hand to be used in introducing or removing a book. In the Adams patent there is no suggestion that the recess between the rollers is for the purpose of enabling the hand to be used in introducing or removing a book, which I understand to be the main, and, practically, the only, object of carrying the frame back, in the Hoffman device. Not only is it not so described, but the construction shown in the drawing would, in my opinion, be impracticable as a means of accomplishing this result, and a person using the device would not be likely to grasp the book in a position to have his hand pass into the recess between the rolls *b b*, if he were putting a book upon the shelf. The rolls *b b* are shown as of comparatively limited length, and when compared with the depth, so to speak, of the shelf, they are of such a proportion that, as I understand the construction of the device, they would bear upon or support the book only in its central portions, and in my opinion, it would be more natural for a person placing a book on the Adams shelf to grasp it outside of the rolls *b b*, so that the hands of the operator would naturally pass beyond the outside limits of said rolls. If, however, the hands of the operator did pass between the rolls in the recess it would operate as a detriment rather than as an advantage over the old structures, for the reason that the spring E and the fastening devices, *a*, would be apt to interfere with the movements of the hand, and would be more liable to injure the hand of the operator than if he grasped the book outside the limits of the rollers.

More than that, as the operation of the device is described in the Adams patent, it is stated that "When a book is to be placed in position, it is first rested on the spring rollers *b b* of the spring E, which by its own inherent elasticity assists in forcing the book onto the rollers D D to its proper place;" and it will be seen from this that the book is easily passed by means of said rollers D D when the book is placed on the rollers *b b*, the spring E yields of its own elasticity, and this would naturally bring the parts into such a position that the hand of the operator would be more liable to injury if grasping the book in a position corresponding to the recess between the rolls *b b* than in a position beyond the limits thereof. From this and other constructions, I do not consider the recess between the rolls *b b* to be the same thing as, nor to be the substantial equivalent

of, the structure of the Hoffman patent, in which the frame is carried back to permit the admission of the hand between the front roller sections; and referring more particularly to the language of the present question, the recess between the front rollers would not in my opinion enable the hand to be used in introducing or removing the book from the Adams shelf, for as above stated, the hand could better be used at the ends of the rollers for this purpose than between the rollers, and with less liability to accident.

41 Mr. MUSSEY: The answer to the above question is objected to as irresponsive and argumentive, with the exception of that portion of it beginning: "And referring more particularly," &c., on this page.

52 X Q. Do you mean to be understood as saying that the recess shown between the small rollers *b b* on the spring E of the Adams patent could not be used as a hand grasp or hold?

A. I do not mean to say that the book could not be applied to the Adams shelf in such a manner that the hand of the operator would come or pass into the recess between the rolls *b b*, but I do mean to say that there is nothing in the patent indicating such a use of this recess, nor does it appear to me that the recess was intended for such a purpose; and further it appears to me that it would not be natural to so use it by one skilled in handling books in connection with roller shelving, as for the reasons above given, it would be more natural in my opinion to grasp the book in a position to cause the hands to pass by the exterior ends of the rollers *b b* in order to force the book backward in its proper position on the rolls D D as there would be less danger of injuring the hands in this use than if the hands passed into the recess between the rolls *b b*.

53 X Q. Looking at the specification of the Adams patent 338,459, is there any limitation placed upon the size of the rollers *b b*?

A. There has been no specific dimensions given for these rolls, and we can only determine their relative size by the general construction of the device and the figures of the drawings.

54 X Q. Would the same remark apply to the spring E?

A. The spring E is more specifically described in the specification than the rollers, in the portions quoted in my former answer, and the specification does not give any exact measurements or proportions.

55 X Q. And no proportionate measurement, as I read the patent, is given to the width of the rollers D D?

42 A. The specification does not give any proportionate size on the rollers D D.

56 X Q. In embodying in practical form patents where no definite proportions or measurements are called for by the specification and claim, is it not customary to leave those features to the mechanical judgment and skill of the manufacturer?

A. This is true, as I understand the question, it only being necessary that the embodiment of the invention is made in such a struc-

ture as to carry out the principles of the invention, as illustrated in the drawing and described in the specification of the patent.

57 X Q. Your answers indicate that you do not regard the recess formed by the bending of the spring in the Adams patent as possessing to the same degree the advantages claimed in the Hoffman patent, 450,124. Is that so?

A. I can find nothing in the specification of the Adams patent setting forth any advantages of the recess between the rolls *b b*, and in my opinion the advantages of carrying the frame back to form recess in the Hoffman patent differ in kind from whatever advantages may arise from the construction of the recess in the Adams patent; that they are intended to and subserve different purposes, practically considered; that one is the characteristic feature of the invention, while the other is an incident of construction; that the one is a practical device for the purposes set forth, while the other is an impracticable device for the same purposes, and that there is something more than a mere matter of degree.

58 X Q. Do you regard the carrying back of the frame in the Hoffman patent 450,124, so as to form a *a* recess, an essential portion of that patent?

A. I regard the construction of a frame with a recess in the front portion thereof, between the front-roller sections, as an improvement and essential feature of the claim of the Hoffman patent. Whether, if I understand the purport of the question correctly, the front bar of the frame is carried back; or, in other words, if the
43 integral bar is bent to form a recess, or whether the front of the frame is made in separate pieces, which are carried back or arranged to form a recess between the front rollers, which shall be substantially the recess of the Hoffman patent, in function as well as in construction, is immaterial, as they are, in my opinion, equivalents of each other. The essential feature of this recess in the Hoffman patent is that it shall expose a portion of the book to the grasp of the operator, so that in placing the book on the shelf, or removing it therefrom, the hand of the operator will not be injured; and this recess should be of such a construction as to permit this operation, and to facilitate the placing and removing of the books on the shelves in the proper manner, without danger of injury to the book or to the hand of the operator.

59 X Q. In figure 17 of the Specialty Company's catalogue, the frame apparently consists of two end pieces, at the rear of which is a large roller and two double braces, united by a center brace, carrying at one end of two short rollers, the other end being connected with the two exterior end pieces, and in front two short rollers, one end of each of which if connected with an end piece, and the other with a half-oval support, carrying the other ends of the two shelf rollers referred to. Please point out as concisely and specifically as you can the particulars in which you claim that this roller book shelf infringes the second claim of the Hoffman patent.

A. Comparing the shelf illustrated in figure 17 of the Exhibit Catalogue with claim 3 of the Hoffman patent, I find in the shelf of the catalogue substantially the same combination of parts as is set

forth in that claim. Thus the said claim calls for a book shelf which I understand to mean an article of manufacture and structure complete in itself, adapted for use for the purposes set forth in the specification and in the catalogue. I find such a shelf illustrated by itself in said figure 17, and in figure 18 one of the uses to which said shelf is applied is illustrated. I find that claim 2 of the patent, calls for the combination of certain elements
44 in such a book shelf, the first element being "a supporting frame;" and the catalogue, figures 17, illustrates such a supporting frame, and the context describes it. The second claim of the patent calls for another element, "Second, a series of horizontal rollers;" and I find in the drawing of the catalogue a supporting frame in a book shelf showing a series of horizontal rollers, and a description of said rollers in the context of the catalogue. The claim of the patent calls for, "Third, the front roller in two separate sections;" and the shelf illustrated in figure 17 of the catalogue shows the front roller in two separate sections, and the context so describes said roller. The claim of the patent further calls for, "Fourth, the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections;" and I find in said catalogue shelf, that the part of the frame between the two separate sections of the front roller is carried back to permit the admission of the hand between said rollers, and is so described in the context for such a purpose. Claim 2 of the patent ends with the phrase "substantially as described," by which I understand that the claim called for a book shelf having a combination of the several elements recited, the elements being constructed and arranged substantially as described in the body of the specification of the patent, and as illustrated in the drawing attached to the patent, and having the functions and characteristics set forth; and looking at the shelf in the catalogue, I find it is constructed and arranged substantially as set forth, and has all the features called for in said claims, and is described as being for the purposes set forth in the specification of the Hoffman patent; and in my opinion the said roller shelf, figure 17 of the catalogue, is the full equivalent of the structure of book shelf forming the subject-matter of claim 2 of the Hoffman patent.

60 X Q. Do you regard figure 16 of the catalogue as an infringement of the Hoffman patent, 450,124?

45 Mr. FOSTER: Objected to as incompetent, the court being the judge of the question of infringement.

61 X Q. Then I will put it this way: Do you regard figure 16 of the catalogue as covered by any claims of the Hoffman patent, 450,124?

A. Comparing the second claim of the Hoffman patent with the structure illustrated in figure 16 of the catalogue, I do not find the front roller into separated sections, nor do I find a frame carried back to permit the admission of the hand between said roller sections, and in my opinion the structure shown in figure 16 of the

catalogue is not the equivalent of the device forming the subject-matter of claim 2 of the Hoffman patent.

62 X Q. Supposing in figure 17 that central half oval shown in the front were out, and the divided front roller were made continuous, would that in your opinion be covered by any claim in the Hoffman patent?

A. For substantially the reasons given in my previous answer in regard to figure 16, if I understand the question correctly, the hypothetical change in the structure of the shelf illustrated in figure 16 would not be the equivalent of the structure forming the subject-matter of the second claim of the Hoffman patent.

Redirect examination.

By Mr. FOSTER (*de bene esse*):

63 Re-D. Q. Applying the same interpretation to the Hoffman patent that you have applied on cross-examination to the Adams patent, do you find anything in the Hoffman patent that would require the manufacturer, in order to bring a structure made by him within the terms of claim 2 of the Hoffman patent, to adhere strictly to the special construction of the frame illustrated in the drawings of the Hoffman patent?

A. Certainly not. It is essential, as I understand it, that the structure, to come within any claim, must be substantially
46 such as indicated. In other words, it must be adapted to carry out the invention claimed, and must be capable of operating and intended to operate in substantially the same way, and produce substantially the same results; and any slight variation in the specific details of the construction of any one or more of the parts is immaterial, so long as the purposes and objects of the invention claimed are accomplished.

64 Re-D. Q. What supports the book in the Hoffman structure?

A. The book when in position rests upon the rollers.

65 Re-D. Q. What is the function of the short front rollers of the Hoffman structure if they have any, in addition to supporting the book?

A. They support the front edge of the book when it is in place, and they serve as a means to assist in inserting or removing the book, to prevent abrasion or injury to the book, if it should, as in the absence of the rollers, come in contact with the frame.

66 Re-D. Q. You have referred to roller shelves, of which you had knowledge when you were in the Patent Office. State whether any of such roller shelves consisted of shelves complete in themselves, adapted to be inserted and withdrawn from the cases, and of which the cases form no essential part?

A. They did not.

67 Re-D. Q. Also state whether any of these shelves had frames which entirely supported the rollers, and with rollers in front of the front bar of the frame?

A. They had not.

68 Re-D. Q. State whether figure 16 of defendants' catalogue shows the position of the front roller in respect to the case?

A. It does not.

69 Re-D. Q. What was the size of the wooden rollers that were used in the Patent Office for supporting portfolios and drawings?

Mr. MUSSEY: Objected to as immaterial.

A. My recollection is that they were two inches, or perhaps more, in diameter.

47 70 Re-D. Q. State whether or not the roller shelves used in the Patent Office were shelves of a character to be used as substituted for what is contained in the Hoffman patent, in any practical sense.

Mr. MUSSEY: Objected to as already covered by the witness' testimony.

A. They were not.

71 Re-D. Q. Look at the Adams patent, and state what it is that supports the book when it is in place in the case, and constitutes the shelf.

A. As I understand the Adams patent, when the book is in place it is supported upon the rollers D D.

72 Re-D. Q. Do you understand that the rollers *b b* support the book when it is in place?

A. I do not. They are not so described, and are shown as extending beyond the limits of book-case, and naturally could not be properly used as supports for the book.

73 Re-D. Q. Then do or do not the rollers *b b* and their spring E constitute any part of the frame of the shelf?

A. They do not.

74 Re-D. Q. What do you understand to be the object of the spring E and its rollers at the ends in the Adams patent?

A. The object set forth in the Adams patent is that when the book is to be placed in position, which I understand to mean when the book is to be placed upon the rollers D D, the book is first rested on the spring rollers *b b* of the spring E and the spring and the rollers carried thereby, assist in placing the book onto the rollers D D, which the patent states is the proper place for the book.

75 Re-D. Q. Assuming that when a book is placed upon the rollers *b b* the spring E yields and takes up the shock, and the rollers *b b* are thereby depressed by the weight of the book, and the book is then shoved inward; what does it come in contact with?

A. It would be liable to come in contact with the ends of

48 the bars A A or what is termed the point *c* which is shown at the ends of said bars projecting nearly to the level of the rollers D D.

76 Re-D. Q. Assuming that it was desired to place a book upon the Adams shelf with as little liability to interfere with the hand as possible in getting the book fully into position, would that object be attained best by keeping the spring E and its rollers in position, or removing the said spring and its rollers?

A. In my opinion, it could best be accomplished by removing the spring and the rollers carried thereby.

77 Re-D. Q. Assume as has been suggested, that the Adams rollers were differently proportioned, say that they were six or eight times as long as represented, and the weight of the book-case upon the unsupported ends of the rollers as well as upon the other parts; would such a structure be a structure within the terms of claim 2 of the patent sued on, having a supporting frame?

A. It would not.

78 Re-D. Q. What do you understand is to be supported under the terms of the words "supporting frame," in claim 2 of the patent sued on?

A. The specification of the Hoffman patent describes the frame as supporting the rollers, which in turn guide and support the book.

79 Re-D. Q. State whether you know whether or not the Adams patent was referred to by the Patent Office when the application of Hoffman was being prosecuted?

Mr. MUSSEY: Objected to, as having been already answerd by the witness.

A. It was referred to by the examiner in charge of the application.

80 Re-D. Q. State whether or not the patents of Reed, 359,691, of Judge and Farrelly, 303,291, and of Conant, 316,241, were referred to when the Hoffman application was being prosecuted in the Patent Office.

A. They were referred to.

Recross-examination by Mr. MUSSEY:

49 81 Re-X Q. Referring to question 73 of the redirect examination, and your answer thereto, would it be impracticable, in your opinion, to place the spring E with the small rollers *b b* upon it, in such a position in a book-case that it would not extend beyond the case itself, or would such a construction contravene any claim of the Adams patent?

A. As I understand the construction of the spring E carrying the rollers *b b* of the Adams patent, and the function ascribed to them, it would be impracticable to place this spring in the position called for by the question; especially would it be so in any construction of case similar to that illustrated in the Adams patent. It is stated in the patent that the spring E is secured by fastenings as to one of the supports B which is shown as the front cross-piece of the book-case, and the spring is bent first in the form of a staple, then to the right and left, then upward and outward, and on the outer ends are mounted the rollers *b b*. The spring when mounted to carry out the object of the Adams patent must be in a position to yield, and by its own elasticity to assist in forcing the book back on the rollers D D, which is stated to be the proper place of the book. I cannot conceive how the spring and rollers could be mounted as called for

in the question, and carry out the purposes and objects or comply with the features of construction, set forth in the Adams patent.

82 Re-X Q. You have stated that the rollers D D are the proper place for the book when put on the shelf. Is not the language of the specification as follows: "When the book is easily passed by means of said rollers D D to its proper place."

A. That is a correct quotation from the specification of the Adams patent. I think to clearly express the idea of the specification, the quotation ought to have included the clause preceding the one quoted, which is as follows: "Which by its own inherent elasticity assists in forcing the book onto the rollers D D."

83 Re-X Q. Would not the inherent elasticity referred to in the specification of the spring E lift the book when it was being placed in position above the screw *n*, and the upper surface of the roller bar?

A. As shown in figure 1, which I assume to be the normal position of the rollers *b b* and the spring, they are practically on a level with the rollers D D, and drawing a line which would represent the cover of the book resting on the front roller D and the small roller *b*, it would come very near bearing on the screw *n*, if it would not actually touch said screw; and if under these circumstances the spring should yield to a slight extent, the book cover would certainly bear upon the top of the screw *n*, and probably be injured thereby.

84 Re X Q. I suppose, however, the screw end could be countersunk?

A. The patent does not show or describe the screw end as being countersunk; but in the event that it were shown countersunk, any considerable yielding of the spring E would allow the book cover to impinge upon the end of the bars A A of the point *c*.

85 Re-X Q. Have you ever seen a model of the Adams invention?

A. There was no model filed with the application; and so far as my knowledge goes, the device has never been used practically.

86 Re-X Q. I find I omitted to ask you one question in the cross-examination. Have you any personal knowledge of any manufacture, use or sales by the defendants of the device which it is sought to restrain by injunction, since the 7th of April, 1891?

A. I have no personal knowledge.

By Mr. FOSTER:

87 Re-D. Q. Would the object of the patentee, Adams, set forth in his patent, be accomplished if the spring E, and the rollers *b b*, did not yield under the weight of the book placed upon it?

A. It would not.

By Mr. MUSSEY:

88 Re-Re-X Q. And the result of that yielding would be to throw the book up, would it not?

A. I do not so understand it.

The testimony of this witness having been taken by a stenographer, it is stipulated and agreed by and between counsel that the examiner may also sign the disposition for the witness.

The taking of these dispositions was thereupon adjourned until 2.30 o'clock p. m., April 26, 1892.

51 DISTRICT OF COLUMBIA, } ss:
City of Washington, }

James W. Hine, being duly sworn according to law, says:

I am 41 years of age, and a resident of Jamestown, New York State. I am engaged in manufacturing, erecting and selling metallic fixtures, and am associated with the Fenton Metallic Manufacturing Company, of New York State, having its principal place of business in Jamestown of said State, and am a stockholder in said company and am manager of that company.

I have been engaged in the sale of metallic office fixtures, including shelving, for six years, and for four years have been engaged in the manufacture as well as the sale of such fixtures.

At the time I became engaged in the business of selling office furniture and fixtures there were sold upon the market, and put in and used, roller shelves having metallic frames and straight rollers, extending the whole length of the shelf. So far as I am aware these were only sold to a very limited extent, and I never saw more than a few of them in use, and I soon became thoroughly acquainted with the art and with what was being done, and to the best of my knowledge and belief such shelves never had a very extended sale and never could have a very extended sale in consequence of their defects.

Early in the year 1887 I for the first time had my attention called to a new form of shelf, which as I was then informed was the invention of H. J. Hoffman, the patentee named in the patent in suit, the said shelf having a metallic frame with two short rollers in front, separated to leave a space between them, which space was sufficient for the introduction of the hand in grasping a book and taking it from the shelf or in putting the book upon the shelf.

Shortly after this time, in the spring of 1887, I began the sale of shelves of this character, which shelves were substantially of the form and construction illustrated in H. J. Hoffman's United
52 States letters patent No. 450,124, and which I have read and understand, and I have been engaged in the sale and erection of such shelves, alone and in connection with other office furniture since that time.

I found that this form of shelf remedied serious difficulties incident to roller shelves that had previously been made. It not only supported the books properly in position in the cases and permitted them to be moved in and out with but little friction, but also prevented the wounding of the books when placing them upon the shelves, facilitating the placing of them upon the shelves, and permitted the operator to grasp the book to remove it from the shelves without wounding his finger and also to replace the books upon the

shelves without bringing his fingers in contact with the frame, and without forcing the fingers between the edges of the frame and the book, at the same time the forward rollers were supported in such a position that they were below the forward edge of the book and support this edge. This was a most important matter, because otherwise if the front rollers occupied a position to any extent back of the forward edge of a heavy book, the latter would not be properly supported and would sink down and the book would lose its shape and break at the binding. At once upon offering these shelves to the public, they met with favor, and in a little while quite an extensive demand arose for the said shelves, which demand has increased from time to time ever since, until at this time they are sold in very large quantities. Since the time when the said shelves were first offered to the public to the present time, at least 60,000 have been put into use. The actual number used is probably much larger, but I am not aware at the present time of the number of such shelves as have been made and put into operation by unauthorized parties. In consequence of the excellency of this character of shelf, they rapidly displaced other forms of metallic shelving, so that to my knowledge there are very few other forms being at present manufactured and used. At the time I first began the sale and introduction of the Hoffman shelf, the Schlicht &
53 Field Co., of Rochester, were manufacturing and selling a shelf with rollers extending the whole length of the shelf, and during the year 1887 the Hoffman shelf was offered in competition with the long roller shelf made by the Schlicht & Field Co., and was almost invariably successful; so far as I can recollect and determine there were but one or two contracts out of the twenty that were awarded to the Schlicht & Field Co., for the shelves having long rollers, the remainder being all awarded to the firm of Hine, Kelly & Co., of which I was then a member, and which firm had authority from the inventor Hoffman to sell the shelves.

In October, 1888, at the time of the organization of The Fenton Metallic Manufacturing Co., under the laws of the State of New York, I became connected with said company, and in November, 1888, the said company purchased from the assignee of Hoffman the entire interest in the said roller shelf, and in any letters patent that might issue thereon.

The firm of Schlicht & Field failed in business and the Office Specialty Manufacturing Company, a corporation under the laws of the State of New York, succeeded to the said Schlicht & Field Company, and in the spring of 1888 the said Office Specialty Manufacturing Co. was engaged in manufacturing and selling roller shelves substantially like the Hoffman shelf, and to the best of my knowledge and belief, the firm of Schlicht & Field Company also engaged in the manufacture and sale of this shelf before the organization of the Office Specialty Manufacturing Co.

The Fenton Metallic Manufacturing Co., as the assignee through mesne assignments of H. J. Hoffman, prosecuted his application for letters patent in the U. S. Patent Office. And before any letters patent were issued to the said Hoffman, an interference was declared

between the application of said Hoffman and an application filed by M. R. Jewell and Philip H. Yawman for letters patent for a like improvement, and the interference was contested by the
54 Fenton Metallic Manufacturing Co., as the assignees of Hoffman, and by the Office Specialty Manufacturing Co., as assignees of Jewell & Yawman.

I was present at the taking of a large portion of the testimony on behalf of Hoffman in the interference between Hoffman and Jewell & Yawman, and I have read the testimony on behalf of Jewell & Yawman in the said case, and I find from said testimony that Major R. Jewell testified in regard to the invention of the Jewell & Yawman application, as follows: "43 X Q. Have you assigned your interest in the invention in controversy, and if so, when and to whom? A. I assigned my interest in the application to the Schlicht & Field Co.; I cannot give the exact date as I have no record of it. It was some time in March or April, 1888. 44 X Q. Had you any understanding with the Schlicht & Field Co. prior to that date as to whether you should assign to them inventions made by you? A. There was a verbal understanding with Mr. Field that inventions or improvements directly in the line of their established business should be assigned to Schlicht & Field."

Phillip H. Yawman, one of the parties to the said interference, testified regarding said invention of said application as follows: "45 X Q. You were present during the examination of the witness, Major R. Jewell, were you not? A. Yes, sir. 46 X Q. Have you assigned your interest, or any part of it, in the invention in issue? A. I have. 47 X Q. When and to whom? A. I cannot state when I assigned, but I think it was in the spring of 1888, to the Schlicht & Field Co."

Major R. Jewell, to 67 X Q. states as follows: "67 X Q. When did the firm of Schlicht & Field become the Schlicht & Field Company, and when did the latter become the Office Specialty Manufacturing Company? A. The date of the transfer of the business of Schlicht & Field to Schlicht & Field Co. was the 1st of August, 1886, and the formation of the Office Specialty Manufacturing Co. was, I believe, completed some time in July, 1888,"

55 Since the organization of the Office Specialty Manufacturing Co., the said company, through its agents, offered for sale in competition with the shelves of the Fenton Metallic Manufacturing Co., shelves that are substantially like the aforesaid Hoffman shelf, and have sold large numbers of such shelves, which have been put into use instead of the shelves of the Fenton Metallic Manufacturing Co., to the great loss and detriment of said company. And the Office Specialty Manufacturing Co. has extensively advertised and offered for sale roller shelves substantially like the aforesaid Hoffman shelf, and by reason of such advertisement and the representations of its agents of the said company and by the competition of said Office Specialty Manufacturing Co. in the market with the shelves of the said Fenton Metallic Manufacturing Co., the sale and adopting and use of the aforesaid roller shelves of the aforesaid Fenton Metallic Manufacturing Co., has been obstructed and retarded and its profit diminished.

After the aforesaid interference between the application of Jewell & Yawman and the application of Hoffman was finally decided by the Commissioner of Patents in favor of Hoffman, the aforesaid letters patent No. 450,124, issued to the Fenton Metallic Manufacturing Co., as the assignees of said Hoffman. Thereafter, and notwithstanding the issue of letters patent to the Fenton Metallic Manufacturing Co. for the said invention, the said Office Specialty Manufacturing Co. continued to advertise, offer for sale, and sell and erect shelves which were substantially the same as those set forth in the aforesaid letters patent to the detriment of the Fenton Metallic Manufacturing Co. and the diminution of its profits. Since the issue of the aforesaid letters patent to the assignee of Hoffman, April 17, 1891, to wit, on or about June 24th, 1891, I called at the office of the Office Specialty Manufacturing Co., No. 731 9th street, in the city of Washington, District of Columbia, and I there saw exposed, as if for sale, among other articles of office furniture, a metallic case having a roller shelf, substantially like the roller shelves of the aforesaid Hoffman patent; that is, said frame
56 had two short rollers in front, and the intermediate portion was of such a character that the hand could pass back between the rollers in putting a book upon and taking it from the shelf. I have examined the catalogue of the Office Specialty Manufacturing Co., marked "Complainant's Exhibit Office Specialty Manufacturing Company Catalogue," and I find, upon page 14 thereof, at the lower right-hand portion, a perspective view illustrating a shelf the construction of which is like that which I saw exposed for sale in the office of the Office Specialty Manufacturing Co., in Washington as aforesaid.

I am practically familiar with the method employed of constructing roller shelves of various kinds, and during the past six years have had occasion to investigate and thoroughly inform myself as to the different methods of manufacture of the different kinds of shelves in use, both roller shelves and other kinds of shelves, and purposes to which such shelves are applied and their operation in actual use, and I consider myself a well-informed expert upon this character of manufactures. I also am sufficiently familiar with drawings to make ordinary sketches to indicate the construction of such structures as roller shelves and book-cases and office furniture, and understand the construction of articles of manufacture from inspection of drawings, and from the reading of their descriptions and specifications. I understand the construction and operation of the shelf illustrated in the aforesaid Hoffman patent No. 450,124, and I also understand the construction and operation of the roller shelf illustrated on page 14 of the before referred to catalogue of the Office Specialty Manufacturing Co. I have compared the shelves of the Hoffman patent and the shelf of the Office Specialty Manufacturing Co. catalogue, and I find that while there is some difference in the proportions and number of the rollers that they are alike in essential features. These features of resemblance are that each shelf consists of a frame and horizontal rollers, the front roller in two separated

sections, occupying only a portion of the length of the frame,
57 the intermediate part of the frame being carried back, forming a space between the rollers to permit the admission of the hand between the roller sections. I have read and I understand the said letters patent No. 450,124 and the second claim thereof, and I find in the shelf shown on page 14 of said Exhibit "Office Specialty Manufacturing Company Catalogue," the structure of said second claim.

I recognize the differences in the construction of the frames of the two different structures, but I do not regard this as material, as it is common to vary the character of the frame according to the positions in which the shelves are to be used, according to the strength of shelf required, according to the expense that can be incurred in the process of manufacture. I also note the difference in the number and length of the rollers of the two shelves, but these will vary for the same reason that the forms of the frame vary. In both the constructions, however, the two separated short rollers at the front with the space between, answer the same purpose of supporting the book at its front edge and preventing that edge from sagging down, of affording a ready means for affording the book to pass onto and from the shelf without wounding the same, and of permitting the hand of the operator to grasp the book in moving it, and to maintain hold of the book in returning it without coming in contact with any portion of the roller support or frame and wounding the hand.

One of the chief uses to which such shelves are put is for the storage of books and bound volumes of documents in Government offices, bureaus, warehouses, etc., and for this purpose the said shelf has been somewhat extensively used by the United States Government, among other places in the departments in the city of Washington, District of Columbia. In order to obtain contracts for putting such shelves into use in such departments it is necessary to submit bids in the Government departments or bureaus in said city, and since the grant of said letters patent to said Hoffman, bids
58 have been submitted for the erection of book-cases containing roller shelves, and such bids have been submitted by the Fenton Metallic Manufacturing Co., in the city of Washington, and the offer by other parties than the owners of the invention to sell such shelves by the issue of circulars and catalogues illustrating the character of shelf shown on page 14, of the aforesaid circular, tends to seriously interfere with the business and profits of the Fenton Metallic Manufacturing Company, compelling them to bid in competition with the Office Specialty Manufacturing Company for the sale and erection of that which they, the Fenton Metallic Manufacturing Co., are the sole and exclusive owners and which the Office Specialty Manufacturing Co. has no right to make, sell or offer for sale.

Prior to the issue of said letters patent No. 450,124 two different parties constructed and offered for sale and sold a limited number of shelves substantially like the shelf of the Hoffman patent, but since the issue of said letters patent there have been no such manu-

facture and sales by any parties so far as I am aware than by the said Office Specialty Manufacturing Co., its employees and agents, and the public has acquiesced in the claims of the Fenton Metallic Manufacturing Co. to the exclusive right to make, sell and use the aforesaid Hoffman shelf, and has desisted from any infringement of the claims of said patent, so far as I am aware, with the exception of the Office Specialty Manufacturing Co., its agents and employees.

JAMES W. HINE.

Sworn and subscribed before me this 3rd day of March, A. D. 1892.

JOHN BRADFORD,
Notary Public.

59 WASHINGTON, D. C., *July 20th*, 1892.

Present: Mr. Foster for plaintiff, Mr. Dodge for defendant.

J. W. HINE, as a witness in rebuttal, testifies as follows, to wit:

1 Q. The Jewell & Yawman specification states that the purpose of the shelf constituting the subject of their application for a patent was to enable them to be manufactured by machinery at slight cost and placed upon the market in their supporting frames complete and ready for use; that the frames required simply to be screwed or bolted fast at their ends to the sides of the case without cutting, fitting or specially constructing the case therefor, and that the invention consisted in a new article of manufacture with a rigid frame provided with a series of rollers, and the claim calls for a rigid portable supporting frame, a series of rollers therein, the front roller divided centrally into two coincident sections and supported by a retreating bar or support. Now examine Exhibits "M. R. J. No. 1"; "M. R. J. No. 3"; "M. R. J. No. 6"; "Plaintiff's Exhibit Adams' Structure," and the construction shown in the Adams patent 338,459, and state whether any one of them possesses the characteristics and is capable of the functions attributed to Jewell & Yawman's shelf in said specification.

A. No, sir; I do not think they do.

2 Q. State whether any one of the exhibits or structures referred to in the last question, except that shown in Jewell & Yawman shelf, is capable of practical use, as a merchantable article of manufacture?

A. I wouldn't regard any of them as capable of practical use as a merchantable article of manufacture.

3 Q. Look at the Adams patent drawing and state whether a structure made like that therein shown would in your opinion find any purchasers if the same was put upon the market, bearing in mind also that the patent states in effect that it is optional whether the bars A, A, are secured to the cross-bar B, or not.

60 A. I don't think it would.

4 Q. In your opinion would a structure like the Indiana shelf "M. R. J. No. 1," protect books from wear either in passingthem over the front edge or onto the body of the shelf?

A. No, sir, it would not; the friction is not removed from the cover of the book, and it would chafe the sides of the cover.

5 Q. State whether in your opinion there is any material difference between the construction shown in Fig. 17 "Specialty Co.'s catalogue," that shown in Hoffman frame, that shown in Exhibit "M. R. J. No. 4," and that shown in Exhibit "M. R. J. No. 5"?

A. I don't think there is any material difference.

6 Q. State whether or not the different structures referred to in the preceding question are intended to be erected in the same way, and whether or not they accomplish the same result when they are erected?

A. They accomplish substantially the same result. They are erected and secured in substantially the same way.

7 Q. Examine Exhibit M. R. J. No. 6, state whether you find there any series of horizontal rollers which support the book when the latter is back in its proper place?

A. There is no series of rollers in Exhibit No. 6.

8 Q. When the book is back in its place in Exhibit No. 6, what supports the book?

A. It rests on three rollers.

9 Q. Do you find in Exhibit No. 6 that any part of the frame is carried back to permit the hand to pass between the two front rollers?

A. I do not.

10 Q. Mr. Jewell alleges his belief that the invention of the Hoffman patent was first made by yourself. State whether or not it originated with you or Mr. Hoffman, to the best of your knowledge and information?

A. It originated with Mr. Hoffman.

61 11 Q. State when Mr. Hoffman first communicated to you the fact that he had invented a shelf of the character of the patent in suit?

(Objected to as incompetent.)

A. My recollection is that—the first intimation that I had of the invention was through Mr. Hoffman himself, some time in March 1887. I don't recollect having had any conversation with him previous to that.

12 Q. Examine Fig. 2 of Hoffman's patent in suit and state whether or not the bent-back portion of the frame passes sufficiently back of the central-bearing line of the front rolls to permit the hand or fingers to pass into the retracted portion?

A. It does.

13 Q. State whether or not the hand hold in Exhibit "M. R. J., No. 1" extends far enough back to permit the hand or fingers to pass into the same when the groove of the book receives the rollers.

A. There is not room to grasp the book without the fingers coming in contact with the shelf.

Q. 14. The frame of the shelf in patent 450,124 in suit has the front bar composed of several parts. If said bar is made of several

parts or of one part, does it in any or not in any way vary the effect of the retracted portion in its relation to the front rolls?

A. It does not.

15 Q. State whether or not, if you know it, shelves have been made and put on the market with the frames constructed as shown in the Hoffman patent in suit?

A. Yes, sir, they were.

16 Q. State whether or not in your opinion a frame having the two front rollers receiving the groove of books and a single roller in the frame back of the front bar would be of a practical saleable character as a roller shelf, securing the advantages of a roller shelf.

A. In my opinion it would not.

Cross-examination by Mr. DODGE:

17 X Q. While testifying as an expert in this cause you are a member of the complainant's corporation, are you not?

A. Yes, sir.

62 18 X Q. Previous to entering the corporation of complainant, you were in service of *the* Schlict & Field, predecessors to the present defendant Co.?

A. Yes, sir.

19 X Q. At the time of the application of the Hoffman patent in suit, portable roller shelves having rigid metal frames adapted to be screwed fast at their ends to the sides of the case were a common article of manufacture, in various forms, were they not?

A. I think they were. That might be qualified to a certain extent, as while roller shelves were common, roller shelves in which the rollers were supported by a frame independent of the upright were not very common.

20 X Q. But prior to the application of the patent in suit shelves containing rollers, having rigid metal frames adapted to be fastened to the sides of the case in practically the same manner that the shelf now in suit was fastened were sold in the market by different makers?

A. Yes, sir.

21 X Q. Do you understand that the Hoffman patent in suit requires any particular number of rollers to be used?

A. I do not.

22 X Q. What limitations, if any, do you find in the Hoffman patent in suit, as to the length of the rollers which must be used, in order to constitute the shelf of the patent?

A. I do not think there is any reference made to the length of the rollers in the patent.

23 X Q. What is your view as an expert as to the length of the rollers which must be used in order to come within the construction laid down in the Hoffman patent, if any variation is allowable?

(Objected to as the witness is not produced as a patent expert.)

A. I would not be competent to answer the question.

63 24 X Q. As a mechanical expert or expert on roller shelving, what is your view as to the effect mechanically of length-

ening or shortening the various supporting rolls shown in the Hoffman patent?

A. It would depend altogether on circumstances. The Hoffman patent contemplates rollers of sufficient length and quantity to furnish a solid and substantial support to a book; to shorten the rollers would necessitate increasing the number.

25 X Q. It is a fact, is it not that, before and since the date of the application for the Hoffman patent in suit, it was the custom of the mechanic to use a larger or smaller number of rollers for the shelf and to use rollers of greater or less length according to the size and weight of the book which the shelf was to carry?

A. I do not know about any other shelf than the Hoffman, but as regards that the rollers were always made of one length. I know what they use. We vary the number but not the length.

26 X Q. It has been the practice, then, of the Hoffman Co., to use rollers of one length without regard to the length of the book which is to be supported by them?

A. Yes, sir.

27 X Q. In the Hoffman shelves as manufactured for the market and as represented in Fig. 2, of the patent in suit, the bars of the frame lying at the front of the roller are projected outward considerable distance beyond the bars which carry the rollers, are they not?

A. Yes, sir, they do project latterly further out.

28 X Q. In your answer 393, you say in substance that the making of the front bar in one piece, as distinguished from several pieces, is an immaterial change as regards the patented shelf. Now, as a mechanic, what is the requirement as to the construction of the frame as regards its form, the parts of which it is composed, or the manner in which they are united?

64 Objected to as not correctly quoting the witness' answer, and because the question 14 was not directed to the witness as a patent expert, and he was not called upon and did not answer the same with the view of determining the scope of the patent, and the witness' attention is directed to the question which is read to him.

Defendant's counsel requests the witness to answer the question in the same capacity, whatever that may be, in which he testified in chief, regarding the matters in question.

A. There might be a good many different constructions. The requirement is rigidity.

29 X Q. Am I to understand, in your opinion as a mechanic, that any frame which is rigid in the case which supports a series of rollers to sustain the book, and which also sustains a front roller in two sections with a space or opening between them for the admission of the hand, would be a mechanical equivalent of the frame shown in Fig. 2 of the Hoffman patent?

A. It would depend upon the details of construction.

30 X Q. Please explain what you mean by your last answer.

The two preceding questions objected to as indefinite, as it is obvious that the witness cannot state the requirements of a roller frame unless he is informed what the said frame is to effect beyond merely supporting the book.

A. By details of construction is meant, 1st, the form of the bars constituting the frame, the method of connecting these bars so as to form a frame, their location in the frame, the size and location of the rollers, and the location of the entire structure within the case.

31 X Q. Please say, as an expert mechanic, what requirements, if any, there are to make a shelf answer the purpose of that described in the Hoffman patent other than the following: 1st, a series of rollers to sustain the book; 2d, a divided front roller; and 3d, a frame of such construction that it will sustain the rollers mentioned and leave a space or opening at the front for the admission of the hand between the sections of the front roller.

A. I should think so, if I understand the question.

32 X Q. What else is necessary?

A. A rigid frame is necessary.

33 X Q. Is it sufficient if the frame is rigid when fastened in place in the case in which it is to be used, or must it be rigid before it is put in place?

A. The parts constituting the frame should be riveted together before it is put in the case, that means rigid.

34 X Q. Am I correct in understanding that prior to the time of the application of the Hoffman patent in suit there were sold in the market by other parties, shelves with rigid iron frames containing long rollers, extending from end to end, that there were also in the market shelves with rigid frames and with a roller exposed at the extreme front to support the book during its application and removal?

A. To the first part of the question, yes; to the second, not to my knowledge.

35 X Q. Do you not know that prior to the application of the Hoffman patent in suit there were in public use book shelves which had a horizontal roller exposed at the front forward of the frame to support the book?

A. No, sir; I do not know.

36 X Q. In one of your answers during your examination-in-chief you referred to a frame "carried back to permit the hand to pass between the two front rollers." Please explain what you mean by the expression "carried back," or what you understand that expression to mean?

A. In the Hoffman shelf it means bent back as now constructed.

37 X Q. Is that the sense you understood the question in answering question 9?

A. I meant that it didn't have the front bar bent back, or cut back, or anywhere put back.

38 X Q. This proves then you consider a frame which has the

front part between the two front rollers cut back, or bent
66 back, or in any way put back, as mechanically the same thing as the construction shown in Fig. 2 of the Hoffman patent.

A. Not necessarily so.

39 X Q. What would be the exception which you seem to have in mind?

A. There might be many.

40 X Q. Have you anything special in mind?

A. The question is too general, it might be cut back or bent back without getting the results as attained by the Hoffman shelf.

41 X Q. The result attained in the Hoffman shelf, so far as the bending or setting back of the frame between the front-roller sections is simply the admission of the hand freely between the roller sections to grasp the back of the book, is it not?

A. I understand it so; yes, sir.

Redirect by Mr. FOSTER:

42 Re-D. Q. So far as you know, who was the first to put upon the market a rigid metallic frame having a series of supporting rolls for the book?

A. H. J. Hoffman. I first saw it early in 1886.

43 Re-D. Q. Regardless of the number or length of rolls in a roller frame, must they occupy any special position to properly support the book?

A. Yes, sir; they must occupy a position in the frame that permits of the top part of the roller always projecting above the frame.

44 Re-D. Q. At what points must they support the book to properly hold it, at the centre or the ends or where?

A. Neither at the centre nor the ends.

45 Re-D. Q. If the rolls supported the book merely along the central portion would that or not be sufficient?

A. It would not; in my opinion an ordinary record book should not be supported in the centre but should be supported from three to four inches on each side of the centre for a sufficient space to prevent the covers from warping.

67 Re-cross examination by Mr. DODGE:

46 Re-X. Q. So far as you know what was the earliest date when roller shelves with metal frames of any kind were put upon the market and in public use?

A. I think in 1886.

47 Re-X. Q. Are you to be understood as saying upon your knowledge and belief that this was the first use or sale of metallic-frame roller shelves?

A. Yes, sir.

Redirect by Mr. FOSTER:

48 Re-re-D. Q. Is the last question answered as to your personal knowledge or based upon information and belief?

A. Personal knowledge. Of course I know that rollers were put

in book-cases without any frames. I had knowledge of a shelf consisting of rollers located in a sheet-iron shelf which was placed between uprights and which was on the market in 1886, being sold by Schlict & Field or the Schlicht & Field Co. I think it was a portable device but had no roller in front.

49 Re-re-D. Q. Upon information and belief have you or not any knowledge of the sale by Hoffman of a rigid portable frame provided with a series of rollers prior to 1886?

Objected to as incompetent.

A. I have information that Hoffman manufactured and sold frames of that character in 1885 and perhaps earlier.

JAMES W. HINE.

68 WASHINGTON, D. C., *May 18th*, 1892.

Met pursuant to adjournment—parties present as before.

F. L. FREEMAN recalled in rebuttal, testifies as follows:

1 Q. Are you the same F. L. Freeman who has before testified in this case?

A. I am.

2 Q. Examine Plaintiff's Exhibit Portfolio, state whether you identify it as one of those that you saw in use in the United States Patent Office.

A. Those in the Patent Office were exactly like it.

3 Q. State whether or not such portfolios were supported by shelves capable of being drawn out and pushed back.

A. They were not.

4 Q. Examine Exhibit "Hoffman Frame" and state whether you find in it the elements of claim 2 of the Hoffman patent in suit?

A. Comparing said Exhibit "Hoffman Frame" with claim 2, I find said claim calls for a book shelf, which I understand to mean a shelf composed of a portable metallic frame in which are mounted the rollers for supporting books, and I find the exhibit in such a frame. The claim calls further for the combination with the frame of a series of horizontal rollers, and I find the exhibit has a series of horizontal rollers. The claim further calls for the front roller in two separated sections, and I find the Exhibit Frame has the front roller in two separate sections. The claim further calls for the intermediate part of the frame carried back to permit the admission of the hand between the separated roller sections, and I find that the Exhibit Frame shows such a construction, it being carried back to permit the admission of the hand between said roller sections. I find that the Hoffman frame has every separate element called for in claim 2 of the Hoffman patent, and that they are all ar-

69 ranged, constructed, and operate substantially as described in said Hoffman patent, and the parts have the same functions in the Frame Exhibit Hoffman Frame as in the frame shown and described in the patent.

5 Q. If in the Hoffman frame exhibit the intermediate part between the front rolls was not bent back but was on a line with the

parts behind the rolls, would the fact that the ears supporting the roller journals projected beyond the front bar, constituting a structure with a part carried back for the admission of the hand, as called for in the Hoffman patent in suit?

A. It would not, as it would not form a structure which would accomplish the purposes and objects of the Hoffman invention, as it would not practically permit the admission of the hand between the separated roller sections to enable it to grasp the book or to pass back of the roller section in placing a book on the shelf. In other words, the function of such a structure would not be the same as the function of the structure called for in the claim of the Hoffman patent, and the two devices would not be the equivalent of each other.

6 Q. Examine Defendants' Exhibit M. R. J. No. 6, and state whether you find in it any part of the frame carried back for the admission of the hand or that secures the functions of the Hoffman patent?

A. I do not. The bar between the front roller sections is straight, and in such position that the hand cannot pass back of such sections without contact with said bar.

7 Q. What do you understand by "carried back" in the claim of the Hoffman patent?

A. That a part of the rigid, portable supporting frame that supports the rollers and between the two separated front roller sections is situated back of said sections so that the hand can pass between the sections to a position back of the same, as is necessary in putting books on and taking them from the shelf.

8 Q. Compare Defendants' "Exhibit M. R. J. No. 4, No. 5,"
70 with claim 2 of the Hoffman patent in suit, and state whether you find in the same the combination of parts set forth in the same?

A. I do. I find in each a book shelf comprising the supporting frame, a series of horizontal rollers, the front roller in each case being in two separated sections, and in each case the intermediate part of the frame is carried back to admit the admission of the hand between the separated sections of the front roller. The function of each exhibit shelf is precisely the same as the structure called for in the second claim of the Hoffman patent.

9 Q. Compare each of the Exhibits, "M. R. J. Nos. 4 and 5" and Exhibit Hoffman Frame, with the terms of the Jewell & Yawman specification and claim, and state whether or not you find in each one book-sustaining rollers of such a character as to be manufactured by machinery at slight cost and placed on the market in their supporting frames complete and ready for use, that require simply to be screwed or bolted at their ends to the sides of the case without cutting, fitting or specially constructing the case therefor, and comprising a rigid, portable frame, provided with a series of rollers, the front roller divided centrally into two coincident sections and supported by a retreating bar or support whereby the admission of the hand between the roller sections is permitted to grasp the book.

A. I find that each and every exhibit referred to shows the con-

struction called for in the Jewell & Yawman specification and claim as stated in the question.

10 Q. State whether or not you have had made a construction substantially in accordance with that illustrated in the Adams patent, 338,459, and if so, produce the same.

A. I have and now produce such structure.

(Structure produced by witness and marked Plaintiff's Exhibit "Adams' Structure.")

11 Q. Does the Adams structure correspond exactly with the Adams patent?

71 A. Mr. Ballouf, the expert model-maker for the U. S. Patent Office, was furnished with a copy of the Adams patent and instructed to make a model, the exact counterpart, of the structure shown in the patent, except that it should be larger, but that the proportions of the parts should be preserved. He was instructed to make the bars B separate from the case. I have compared the model exhibit with the Adams patent and find that it corresponds almost exactly with the structure shown therein.

12 Q. Do you understand that the bars B, of the Adams patent are a part of the book rack or not?

A. The specification of the Adams patent describes the parts B as "supports," and I understand they support the book rack and really form part of the case. The claims of the Adams patent clearly define the book rack and do not include the supports B B.

13 Q. Do you regard the book rack of the Adams patent and of the Adams structure as a practical rack and one which you would accept as a gift for the book-cases of your office?

A. I do not.

14 Q. Do you find in the Adams patent and in the Exhibit Adams' Structure and in Exhibit M. R. J., No. 3, the construction called for in the specification and claim of the Jewell & Yawman patent?

A. I do not.

15 Q. Examine the Defendants' Exhibit M. R. J., No. 1, being the Richmond shelf, and state whether you find in that the construction of the Jewell & Yawman specification and claims.

A. I have examined said exhibit rnd do not find therein the structure called for in the Jewell & Yawman specification and claim.

16 Q. In that Richmond shelf does the hand hole permit the hand to pass back of the rollers?

A. It does not.

17 Q. In that Richmond shelf do the rollers prevent the contact of the book with the stationary front body or edge of the shelf in putting on the shelf?

A. It does not.

71½ 18 Q. In that Richmond shelf does the book when inserted in or withdrawn slide in contact with the body of the shelf or not?

A. It does.

19 Q. State whether you find in this Richmond shelf the com-

bination of parts B set forth in claim 2 of the Hoffman patent in suit.

A. I do not. There is no supporting frame in the sense in which it is used in the patent. There is not a series of rollers supporting the book in the manner set forth in the patent. There is not a front roller in two separated sections in the sense called for in the patent, that is, a roller in front of the frame to prevent the book coming in contact therewith. The exhibit shelf does not show the intermediate part of the frame carried back of the separated front sections of the roller to permit the admission of the hand between said roller sections in the manner called for in the patent.

20 Q. You have handled large numbers of heavy books in the Patent Office library and elsewhere. State where they are ordinarily grasped and how they are supported by the hand in removing and replacing them.

A. For the last fifteen years or more I have been constantly handling such large books in the library of the Patent Office and in the record rooms thereof, and from my experience and observation I find it is natural and customary to grasp the books near the center of the back with one hand, and if necessary in raising the book to grasp the bottom or other edge of the book in the other hand and place it upon the shelf, and to push it back in place by the hand grasping the central portion of the back of the book. While of course this is not a universal practice, from my observation and experience it is the general practice and the most natural and convenient way of handling large books.

21 Q. State whether the roller portfolio supports of the
72 U. S. Patent Office contained the combination of elements set forth in claim 2 of plaintiff's patent.

A. They did not.

F. L. FREEMAN.

Adjourned to May 19th, at 11 a. m.

WASHINGTON, D. C., *May* 19—11 a. m.

Witness and counsel for plaintiff present. Adjourned at request of General Mussey, counsel for defendant-, to the following week, date not fixed.

JUNE 6TH, 1892.

Met in accordance with notice. Parties present: Mr. Foster, representing plaintiff; Mr. P. T. Dodge, for defendant-; witness F. L. Freeman. Mr. Dodge at this point desires to have placed of record the fact of the death of General R. D. Mussey, who has heretofore conducted this cause, since the date of the last meeting. Oral notice given of the adjournment to Thursday, June 9th.

JUNE 9TH, 1892.

Met according to notice. Present, P. T. Dodge, Esq., for defendant-; C. E. Foster, Esq., for plaintiff.

F. L. FREEMAN, produced for cross-examination, in answer to questions by P. T. Dodge, Esq., testifies as follows:

22 X Q. Referring to the portfolios long used in the Patent Office, they were laid upon their sides and wholly supported by a series of horizontal rollers on which they could be moved in and out, were they not?

A. That is as I understand.

23 X Q. Referring to the Hoffman patent in suit does it
73 show or describe a frame having a single front bar extended continuously across the frame from one side to the other in one piece, like that in the Exhibit "Hoffman Frame"?

A. It does not.

24 X Q. Referring to the shelf claimed in the Hoffman patent in suit what single feature or element or novelty do you understand that it presents over the roller shelves previously known in the art?

A. The 2d claim of the Hoffman patent is a claim, as I understand it, for a book shelf embracing the combination of a number of features or elements recited therein, arranged and operated substantially as described in the specification and novelty of the claim so far as my knowledge goes, resides in the structure termed the book shelf and embracing the features, or the combination of elements set forth, and adapted for the purposes described. It does not, as I understand it, necessarily depend upon the novelty of any one or more of the features or elements recited.

25 X Q. Do you understand from your investigation of the prior art that any one of the elements enumerated in the 2d Hoffman claim is in itself new at the time of his application for patent?

A. I have never made an investigation of the prior state of the art for the purpose of determining whether this is a fact or not, as it is immaterial to the novelty and validity of the claim. My impression is, however, from the investigations I have made and from the terms of the claim itself, that the separate elements referred to therein, are not in themselves broadly new, otherwise the claim made would have been differently phrased to cover such elements broadly.

26 X Q. What are the requirements or peculiarities of the frame such as specified in the 2nd Hoffman claim?

A. The term "supporting frame" in claim 2 of the Hoffman patent refers, as I understand it, and as set forth in the specification of the patent to a metallic frame in which are mounted rollers for guiding and supporting the books, preferably formed of
74 heavy band iron in sections which constitutes a rigid supporting shelf or rack.

27 X Q. Do you understand that the rigidity of the frame, when detached from the case or support, is a necessary feature of the Hoffman frame?

A. I understand that in order to carry out the invention of Hoffman the supporting frame must be of sufficient rigidity to properly support the rollers for guiding and supporting the books.

28 X Q. Must the frame possess that stiffness or rigidity when it is detached or disconnected from the case in which it is to be used?

A. I think the requirements of the patent would be fulfilled if the frame when in position to be used is sufficiently rigid to properly support the guiding and supporting rollers for the books.

29 X Q. Do you understand that a frame to come within the terms of the Hoffman claim need be of any special form or have its members connected in any special manner, provided it is adapted to sustain the series of rolls and possesses an open space between the sections of the front roll?

A. I do not understand that the frame need be of any special form nor have its members connected in any special manner, provided it is adapted and arranged substantially as called for by the patent and to carry out the purposes and objects of the patent to Hoffman in a practical and substantial manner.

30 X Q. Do you understand that the frame to come within the Hoffman frame must be adapted to carry any particular number of rollers?

A. I do not, provided that it has sufficient rollers to accomplish the object and purposes of the Hoffman invention.

31 X Q. Do you understand that the Hoffman claim demands a frame giving support to the rollers and to each roller at both ends?

A. That is the way the frame is shown in the patent and
75 in all the devices or shelves which I have seen which appear to me to practically carry out the purposes and objects of the Hoffman invention.

(The answer is objected to as irresponsive, and the question repeated with the request for a definite answer.)

A. I know of no structure which would answer what I understand to be the requirements of the Hoffman invention in a practical way, except where the rollers were supported at each end. Whether a structure could be made in any other way which would be a substantial and practical equivalent of this specific arrangement and answer what I understand to be the purposes and objects of the structure of the Hoffman claim I am not prepared to say.

32 X Q. Do you understand that in the shelf defined in the Hoffman claim the hand hold or opening in the front must extend rearward beyond the divided front roll?

A. I so understand it in order to practically carry out the purposes and object of the hand hold of the Hoffman invention.

33 X Q. What is your understanding as to the distance this hand hold must be carried rearward beyond the front roll in order to practically carry out the purpose and object of the Hoffman invention?

A. As I understand the invention of the Hoffman patent the hand hole must extend inwardly a sufficient distance to permit the hand to be readily inserted in the hole to grasp the book in withdrawing it or placing it in position without danger of injuring the hand.

34 X Q. Am I correct in supposing that the depth of hand hole

or opening is a matter to be determined by the experience and judgment of the mechanic who constructs the shelf.

A. There are no specific dimensions given in the patent of Hoffman for any of the parts and it is unnecessary in my opinion to give any specific measurement, as the patent is addressed to persons skilled in the art, and the purposes and objects of the features of construction are stated, and the person so skilled and mak-
76 ing the invention in accordance with the patent would undoubtedly know how to make the different parts and to what depth to make the hand hole, and whether it is slightly deeper or shallower would not materially affect the invention of Hoffman if it was of a depth to practically carry out the purposes and objects of the invention.

35 X Q. Is it not a fact that in Fig. 2 of the Hoffman patent the hand hold or opening extends beyond the rear line of the front roll a distance less than half the diameter of the roll?

A. As I look at Fig. 2, the hand hold extends a little more than half the diameter of the rolls. I do not, however, understand that the drawing of the Hoffman patent is a scale drawing and as a matter of fact the shelf from which the drawing was made shows the hand hold extending considerably farther, relatively to the diameter of the rolls.

(All after the word "and" is objected to as incompetent, the original shelf referred to not being shown in evidence.)

36 X Q. In the Patent Office were the books during your service there laid separably on their sides in cases as practiced under the various roller-shelf system-?

A. Some were, the majority were not.

F. L. FREEMAN.

Adjourned subject to notice.

77 WASHINGTON, D. C., *May* 17, 1892.

Met pursuant to notice at the office of Messrs. Foster & Freeman, No. 931 F street.

Present: Mr. Mussey on behalf of defendant, and Mr. Foster on behalf of plaintiff.

JAMES LAWLOR, witness on behalf of plaintiff in rebuttal, being duly sworn, testifies as follows:

1 Q. What is your name, age, residence and occupation?

A. James Lawlor; about fifty; reside in Washington, D. C.; occupation, clerk in the Patent Office.

2 Q. When did you first enter the Patent Office?

A. First day of August, 1886.

3 Q. Examine the portfolio I now show you, state whether you have seen such portfolios before, where you first saw them and how they were supported.

A. Yes, I have seen them before. In the draughtsman's division of the U. S. Patent Office. There were cleats at both sides of the case and rollers were there with their journals in the cleats.

4 Q. Were the cleats movable or fast?
A. They were fastened, screwed or nailed on.
5 Q. Were there any strips or boards between the rollers?
A. No, sir.

(Portfolio put in evidence and called "Plaintiff's Exhibit Portfolio.")

6 Q. Is Plaintiff's Exhibit Portfolio one of the portfolios that was in the Patent Office?
A. It was taken from the Patent Office.
7 Q. How heavy would one of these portfolios be with the drawings in it?
A. They may vary from 30 to 45 pounds.
8 Q. State whether you weighed the Exhibit Portfolio partially filled with drawings, and what it weighed.
A. 35 pounds.

78 Cross-examined by Mr. MUSSEY:

9 X Q. If you desire to get the drawings in the portfolio, how did you proceed to do it?
A. When I went to get such a drawing out of such a portfolio, I pulled the folio out and laid it on my knee, taking out whatever drawings were called for, then returning it back to its proper place. In some cases there was difficulty if the folio got too full, both in taking it out and putting it back.
10 X Q. Are these portfolios still in use in the Patent Office?
A. No, sir.
11 X Q. When did they go out of use?
A. October, 1867.

Redirect by Mr. FOSTER:

12 Re-D. Q. Were all of the cases having roller supports for the folios taken out in October, 1867?
A. No, sir. We worked a portion of 1868, and there may have been some later on, I cannot tell.

JAMES LAWLOR.

W. C. BURROUGHS, a witness on behalf of plaintiff, being duly sworn, testifies as follows:

1 Q. What is your name, age, residence and occupation?
A. W. C. Burroughs; 55; residence Washington, D. C.; occupation, cabinet-maker.
2 Q. State whether you removed the casing- having roller supports for portfolios, that were taken from the Patent Office in 1867; if so, how the rollers were supported in the cases.
A. I did remove them. They were supported by cleats on both sides with holes bored and journals revolving in these holes.
3 Q. Were the cleats fast to the sides of the case or were they movable?
A. They were screwed fast.
4 Q. Was there any cross-bar or cross-bars forming a frame or

shelf with the cleats, or was there any other support than the side cleats for the rollers?

A. No other support besides cleats.

5 Q. State whether or not the cleats and rollers were so supported as to be drawn and pushed back forming a sliding shelf.

A. No, sir.

Cross-examination waived.

W. C. BURROUGHS.

79 *Defendant's Testimony.*

WASHINGTON, D. C., *May* 10, 1891—1 o'clock p. m.

Met, pursuant to notice, at the office of Gen. R. D. Mussey, 470 Louisiana avenue.

Present on behalf of the complainant, Mr. Foster; present on behalf of the defendant, Mr. Mussey.

Whereupon MAJOR ROMEYN JEWELL, a witness of lawful age, called by and on behalf of the defendant, having been first duly sworn, is examined by Mr. Mussey:

Q. 131. Mr. Jewell, will you be kind enough to state your name, age and residence.

A. Major Romeyn Jewell. My age is 36; residence, Rochester, New York.

Q. 132. What is your present occupation?

A. I am traveling a good deal of the time looking after contracts for metal work for the Office Specialty Manufacturing Company and looking after the men who are working up contracts.

Q. 133. You are connected with that company?

A. Yes, sir.

Q. 134. Have you had any mechanical experience?

A. I have had quite a little as superintendent of the old company.

Q. 135. That is the Schlict and Field Company?

A. The Schlict & Field and the companies or firms preceding it since the commencement of the business.

Q. 136. You were, I believe, one of the parties in interference in the Patent Office—Jewell & Yawman—in respect to the roller shelf interfering with an application of Hoffman?

80 A. I was.

Q. 137. Prior to that interference, did you have any special acquaintance or experience with that form of shelf known as roller shelves?

A. I had for several years preceding. In fact, since early in 1885.

Q. 138. Refer-ing to the catalogue that has been filed here as an exhibit issued by the Office Specialty Manufacturing Company, be good enough to state whether that is a new catalogue or an old one.

(Mr. FOSTER: Objected to as immaterial.)

A. It is a catalogue issued, as I recollect, in 1889. The date is in the front of it.

Q. 139. Has it been supplanted by later catalogues?

A. It has.

Q. 140. A reference has been made to a shelf of the roller form, and in this catalogue there are two exhibits—figures 16 and 17. State, if you please, whether your company is still selling No. 16.

A. Yes, sir.

Q. 141. How about 17?

A. The form as shown in figure 17 has not been manufactured by the company since the issue of patent to Hoffmann, No. 450,124.

Q. 142. Were you familiar with the interference proceedings in the Patent Office between Jewell & Yawman and Hoffmann in respect of their several applications, which culminated in the patent just named?

A. I was.

Q. 143. In these interference proceedings what form was shown by you in your application?

A. Well, virtually, one of the forms shown was like that of figure 17 in the catalogue.

Q. 144. And that was the one in interference?

81 A. Yes, sir.

Q. 145. Are roller shelves, from your knowledge of them as you say you have some knowledge of them since 1885, old or new, generally speaking?

A. Roller shelves, speaking of it in a general way, are to my knowledge now at least twenty years old.

Q. 146. Can you describe any of those old shelves? How were they arranged in respect to rollers and the rollers in respect to them?

A. I found one roller shelf; that is, one form—a great many of the shelves are the same form—that contained two rollers near the front a recessed space going back beyond the rollers—just such a space as is spoken of variously as book hold or hand hold. I find in one place where a number of hundred of such shelves have been in constant use since 1873.

Q. 147. Where is that place?

A. At Richmond, Ind.

Q. 148. In a public building?

A. In the court-house there—in the various offices.

Q. 149. You have seen these shelves in operation?

A. Yes, sir.

Q. 150. Were the shelves which you refer to of this pattern (exhibiting shelf to witness)?

A. This is one of the identical shelves.

Q. 151. Did you obtain it personally?

A. I did.

Q. 152. From the court-house in Indiana?

A. From the court-house in Richmond, Indiana.

(Mr. MUSSEY: I offer said shelf in evidence, and the same is marked "Exhibit M. R. J., No. 1".)

(Mr. FOSTER: Exhibit and testimony referring thereto objected to as irrelevant and immaterial.)

By Mr. MUSSEY:

Q. 153. That has a hand hold or grasp and a couple of short rollers near the front, has it not?

82 A. It has.

(It is admitted by counsel for complainant that the affidavit now shown and marked "Exhibit M. R. J., No. 2," and herewith filed, would be testified to by the clerk whose name is signed there if he were personally present.)

By Mr. MUSSEY:

Q. 154. What is the use of those front rollers?

A. To protect the book from wear, and to admit of its being placed in and taken from shelves with greater ease.

Q. 155. It has been testified to here that the hand hold or grasp is a matter of large convenience and assistance in placing books upon the shelves. How is that?

A. It is no advantage whatever in placing books on shelves.

Q. 156. Has it any advantage?

A. No advantage whatever in placing books on shelves.

Q. 157. Has it any advantage in taking them off?

A. Only in case very narrow books are placed on wide shelves, which is not usual.

Q. 258. Your custom, I understand, is to adapt the shelf to the precise style of shelf?

A. To adapt the shelf to the book that is to be placed on it.

Q. 159. Have you seen shelves made with the hand hold without the roller?

A. Yes, sir.

Q. 160. Often and many?

A. The first time I recollect of seeing such shelves was in 1884.

Q. 161. Where?

A. At the New Orleans exposition.

Q. 162. By whom was that exhibit made there; do you remember?

83 (Mr. FOSTER: Objected to as immaterial.)

A. I am not certain; but I think it was Fennelly & Judge, of St. Louis, Missouri.

Q. 163. It is charged in the bill in this case that the retracted frame of the Hoffman patent, No. 450,124, in connection with the central hand grasp in the corner, is a matter of large demand in the trade, and has, in fact, supplanted other shelves. What is your experience in connection with your company in regard to that?

A. We invariably submit two styles of roller shelves, just as we do two or more styles of files, to our customers, and let them make their selection of the style preferred; and I think it is safe to say that we sell equally as many of the form of figure 16, as we do of the form of figure 17, if not more.

Q. 163½. That is a continuous front roller?

A. Yes, sir.

Q. 164. Have you ever examined the patent issued to A. L. Adams, March 23, 1886, No. 338,459, upon an application filed November 9, 1885?

A. I have at various times.

Q. 165. Is the exhibit which I now show you, marked "Exhibit M. R. J., No. 3," made in accordance with the Adams patent?

A. It is.

Q. 166. You have already stated that in making roller shelving it is customary to adapt the size of the shelf to the book to be used. In all large books that I am familiar with there is a crease between the back binding and the cover. Where is it customary to have that rest?

A. We regulate the depth of the case and the distance of the front rollers from front of case, so that when book is stopped by striking against back of case, the front roller has bearing on the hand
84 side of book, just back of the crease mentioned; as, if the front roller of any form of shelf went into the crease, it would cause some resistance in the moving of books upon the shelf. Another reason for this is, that it allows the back of the book to project sufficiently beyond the front roller to admit of grasping the book at any place desired.

Q. 167. Please look at the exhibit which I now hand you, marked "Exhibit M. R. J., No. 4," and state if you recognize it.

A. I do.

Q. 168. Where did it come from?

A. It is one of a number of experimental shelves that we had made at various times.

Q. 169. What is this exhibit—M. R. J., No. 5?

A. The shelf just handed to me is one of the form of shelves which our company has had manufactured and sold since the issuance of Hoffman patent, before referred to.

Q. 170. Are you familiar with the Hoffman patent No. 450,124?

A. I have examined it a number of times.

Q. 171. And wherein does this differ in structure, if at all—this Exhibit M. R. J., No. 5—from the device shown in the Hoffman patent?

A. It differs considerably in the structure of the frame, and in the fact that while a portion of the frame itself in the Hoffman shelf is bent back to form book hold or hand hold we have sustained the front rollers of our latest form of shelf by brackets attached to the front bar at one end and the end bars of shelf at the other. One reason for structure of frame of our shelf being as shown was to enable us to use rollers as near the entire length of shelf as we could.

Q. 172. Is it not practically cutting up the long roller shown in No. 16 into two small rollers, supported as you have already stated by brackets and by the end of the frame?

A. We consider it so.

85 Q. 173. Look at the structure of two shelves within an iron frame or casing now shown you, and marked "Exhibit M. R. J., No. 6," and state if you are familiar with that.

A. I am.

Q. 174. Can you give the history of it?

A. It is one of the series of experimental shelves before referred to. In fact, the first of the series having front rollers separated.

Q. 175. Did you have anything to do with the construction of it?

A. Not with the actual construction, but with the designing.

Q. 176. Do you remember when that was completed and made?

A. Some time in December, 1886, to the best of my recollection.

Q. 177. Was that exhibit shown in the interference case?

A. It was.

Q. 178. Where was this designed and constructed?

A. In the factory of Yawman & Erve, at Rochester, New York.

Q. 179. It has been stated here in testimony that under the weight of heavy books the long rolls sag and bend against the —, and that the effect of such sagging and the introduction on rolls of books has been to pinch the fingers and abraid the books of those putting books in and of the books. What is your experience in that respect?

(Mr. FOSTER: Objected to as not in accordance with the testimony given in this case.)

A. The question is as to whether the fact that they are of wood or metal cuts any figure. Shall I pay any attention to that?

Q. 180. How as to the sagging of these long wooden rollers?

86 A. Whether wooden rollers would sag or not depends largely upon the diameter of the roller and the weight of books placed thereon. Wooden rollers would be much more apt to warp out of shape than they would to sag from the weight of book- where rollers were of proper strength. As far as sagging of metal rollers is concerned, we have never heard of an instance of the kind, and certainly I have never seen anything of the kind, although I have designed shelves with metal rollers that have been in use about fourteen or fifteen years and are still in constant use.

Q. 181. In either event, of wooden or metal rollers, how about the pinching of the fingers and the abrasion of the books for lack of the hand hold?

A. With full-length front roller, as shown in figure 17 of our 1889 catalogue, where depth of shelf is properly adjusted to width of book, it would be a matter of impossibility to pinch or wound the fingers or abraid the book in any manner; in fact, not near so apt as where the roller was divided, giving *to* additional points or corners at the front; and this is one of the reasons why I individually recommend the continuous roller shelf to prospective customers with whom I am figuring.

Q. 182. Is there any advantage in cheapness of manufacture derived from the hand hold, as shown in figure 17, and shown also *it* the Hoffman patent?

A. Taking our two styles of shelves, figure 16 and Exhibit M. R. J., No. 5, as an example, the last mentioned costs us more to manufacture than the first.

Q. 183. Are you sufficiently acquainted with the affairs of your

company to be able to state whether it is pecuniarily responsible in damages?

A. I am well acquainted with the finances of the company itself, as well as with the financial reputation of the individual members composing the company, to state that the company is amply responsible.

87 Cross-examination by Mr. FOSTER:

X Q. 184. Mr. Jewell, you have stated in your direct testimony that Exhibit M. R. J., No. 3, is a model which accords with the Adams patent; and I shall state to the court when this case comes to be argued that there is not one single feature in that exhibit model that corresponds to the drawings of the Adams patent. I now ask you to point out in that model any feature which in its proportions, construction or arrangement agrees with the drawing of the Adams patent.

(Mr. MUSSEY: The question is objected to, as the model and the patent speak for themselves.)

A. The shelf has two short rollers at the front, which are supported and held in position by a continuous rod, which is formed so as to give a recess between the two front rollers. This rod is attached to a cross-bar of wood by three staples, exactly as shown in patent drawings.

X Q. 185. Referring only to the front rollers, which I understand you to say in the model accord with those in the drawings of the Adams patent, look at figure 3 of the patent, and state whether that does not show the front rollers projecting beyond the front of the case, while the model shows them in another position inside the case. Am I right?

A. You are.

X Q. 186. State whether figure 3 does not show the bent spring that is secured by staples to the cross-bar as projecting beyond the front of the case, while in the model it does not project beyond the front of the case. Am I right?

(Mr. MUSSEY: Question objected to, as it is admitted that no proportions were called for by the specifications of the *the* Adams patent.)

A. You are right in that; but in encasing the model shelf we had in view only providing a support for the shelf, and could just
88 as well have placed the frame far enough towards the front to have had the front rollers project beyond the sides of case.

X Q. 187. Then you might have made the model with the parts in the same relative positions as in the Adams drawing, but you did not; am I right?

(Mr. MUSSEY: Question objected to for the reason above given.)

A. We did not look upon what you term the case part as the direct model.

X Q. 188. Then your statement that the exhibit model is in ac-

cordance with the Adams patent meant that the exhibit model, except the case thereof, was in accordance with the Adams patent; is that right?

A. That is right.

X Q. 189. Are the front rollers of the same proportion, length to breadth, as they are in the Adams patent?

(Mr. MUSSEY: Same objection as before.)

A. We knew they were not.

X Q. 190. I ask the *the* same question as to the other rollers?

A. We knew they were not; and in getting up the model, we used rollers that we had on hand, not considering that the exact length of the roller cut any figure.

X Q. 191. Now, as regards the relative strength of the spring support, which is letter E in the Adams patent. Is it of the same relative strength in proportion to the size that such a spring as that in the Adams patent would be if the case was enlarged to the size of that indicated in the model?

A. There would perhaps be a slight difference, but not much.

X Q. 192. Is not the part that supports the two front rollers in the model practically so stiff that there is practically no
89 spring action in it when a book is placed square upon the rollers. You have just tried an experiment on the model before you with a book. State to what extent that spring part yielded when you put the book on the shelf.

A. The spring was but very slight.

X Q. 193. Probably a 32nd of an inch would be the ex- limit, would it not?

(Mr. MUSSEY: Objected to for the same reason.)

A. I cannot ascertain just what the spring would be; but I wish to state in this connection that the diameter of spring rod used in the model shelf was governed by diameter of holes already in ends of rollers.

X Q. 194. In the Adams patent and drawing are described and illustrated two parallel bars marked A, each of which has a metal plate, *c*, at the front end, with a sharp upper corner. Do you find any such bars, plates or corners in the exhibit model which you say accords with the Adams patent?

A. No; neither do I find any reference to it in specification. I do find the statement, however, that A designates bars of wood or iron having their ends resting upon supports B B.

X Q. 195. Do you not find the statement that these bars have "their outer ends provided with a point *c* to retain them in position," and as a practical mechanic, do you not see and understand from the drawing that these points *c* are plates on the ends of the bars A, the pointed lower ends of which bite into the cross-bar B as shown in figure 1?

A. I do; and I also see equally as plain that large screws, as shown by *n n* would, when brought to their bearing, give sufficient "bite" to make such plates entirely unnecessary in practical use.

(Mr. FOSTER: The latter part of the answer objected to as immaterial.)

90 X Q. 196. I agree with you that the entire Adams structure is practically unnecessary in practical use. But I am asking you to point out the features that are common to the Adams structure and the exhibit model. Now state whether or not you find any such points *c*, in the exhibit model that you have made, as I understand.

A. I think I said no.

X Q. 197. If these points and the sharp edges or corners at the part marked *c* figure 1 of the Adams patent were in the exhibit model which you have said accords with the Adams patent, and if, as stated in the specification of the Adams patent, the spring E had an elasticity and was intended to yield when the book was placed upon it, in case of such yielding would not the back of the book be scraped by the corners of the plates *c*?

A. It would depend entirely upon the strength of wires used for spring.

X Q. 198. Well, if the wire was not of proportion to permit a substantial yielding of the spring and front rollers, then the object of the patentee would not be accomplished, would it?

A. Perhaps not; but even if the spring did yield considerably, and it should be found that it yielded sufficiently to run some risk of book catching on corner of plate E as suggested by you, the only thing necessary to obviate entirely any possibility of the recurrence of such a thing would be to decrease the wi-th of supporting bars A, if made of metal, or the thickness of same, if made of wood.

(Mr. FOSTER: All of above answer after "perhaps not" objected to as not responsive to the question.)

X Q. 199. In the exhibit model the bars that support the roller shafts are made of metal forged down to form flat ears at the opposite ends. Do you find anything of that kind in the Adams patent?

91 A. I do not. Neither do I find metal bars shown in the Adams patent, though it is plainly stated that they can be of metal; and the natural way to attach metal bars is as shown, while with wood it would only be necessary to attach the screws through ends.

X Q. 200. Supposing you were to take the rollers and their supports from the case in the exhibit model and in the Adams patent, would you have a continuous structure, or several loosely connected and separated pieces?

A. The support bars B B are as much a part of the structure and as necessary to it as any other feature.

(Mr. FOSTER: Objected to as not responsive.)

X Q. 201. Are not the bars B B, as shown in the Adams patent, a part of the book-case?

A. Decidedly not; as in figure 2 they are plainly shown with the ends broken off, or as incomplete.

X Q. 202. Refer to the claims of the Adams patent, where the book rack is claimed, and state whether or not the bars B B are stated to constitute part of the rack.

A. They are not; but as before stated, they are plainly shown as part of the structure in figure 1.

X Q. 203. So is the case itself in figure 3. Do I understand therefore that that case is also part of the structure claimed in the Adams patent?

A. Not necessarily; as while bars A are plainly shown attached to cross-bars B B, the latter are not shown as attached in any manner to the case.

X Q. 204. The bars B B are attached to the casing, are they not?

A. They are to be. I am perhaps saying too much as to the invention of Adams in regard to his patent.

X Q. 205. And figure 3 would show to any mechanic that their ends are attached to the casing, would it not?

92 A. It would not. It would leave the attachment to be made in any desired form, we, in our case, attaching them by screws.

X Q. 206. In attaching the ends of the bars B to the side of the casing by screws in the exhibit model, you intended to illustate what you understood to be the construction of the Adams patent, did you not?

A. We did not, as far as the direct attachment to case is concerned, the case portion of model being considered immaterial by us.

X Q. 207. For that reason, I suppose you provided the top of the case with a hand hole, which is not in the Adams patent?

A. The hand hole, as shown in the top of case, has nothing to do with Adams' patent.

X Q. 208. In other words, in constructing the exhibit model, instead of making it in accordance with the Adams patent, and as illustrated in the Adams drawing, you altered the form of the case so that it does not agree at all with the Adams patent; you arranged the front rollers differently in respect to the case from that shown in the Adams patent; you made all the rollers of a different size and proportion from that shown in the Adams patent; you made the spring so stiff that it practically is no spring at all in actual operation; and you made the bars that support the rear roller shafts without any points at the front end, and provided them with ears not shown in the Adams patent. Is that not so?

(Mr. MUSSEY: Objected to on the ground that it was testified to by the complainant's expert that no proportionate measurement is given to the width of the rollers B B that no specific dimensions were given for the rollers, and that their relative size can only be determined by the general construction of the device and the figures of the drawing; and that it was further testified to

93 by him that in reducing or embodying the practical form in patents, where no definite proportions or measurements are called for by the specification and claim, it is customary to leave

those features to the mechanical judgment and skill of the manufacturer; and further, because as a matter of fact, the front spring here does subserve the purpose is seen by an application to it of throwing the book up.)

A. It is not so. I have plainly given reasons why the rod used was of the diameter, and I will also again state that the rollers were not made for this model, we, in constructing it, using rollers already on hand, knowing well that specifications did not call for any specific length or width.

X Q. 209. I repeat the question.

A. We did not, except perhaps as relates to plates c which we did not notice; and as far as the front rollers being back of front of case is concerned, a moment's work on the model shown would change that entirely.

X Q. 210. Did you not alter the form of the case so that it does not agree with the Adams patent?

A. Not intentionally.

X Q. 211. Did you not alter the form of the case so that it does not agree with the Adams patent? I am not asking about your intentions, but simply about the fact. Did you make the case to agree with that shown in the Adams patent or not?

A. It is in all essential features except that front rollers do not project beyond front of case.

X Q. 212. Now you know very well that the Adams patent has not any hand hole in top of the case, and that it does have a rib across the top of the case; and I want to know why, therefor-, you say you made the case like that shown in the Adams patent?

(Mr. MUSSEY: Objected to, because it has already been answered that that was inadvertently placed there.)

94 A. You ask why we did not make the case as shown in Adams' patent?

(Mr. FOSTER: Counsel interrupts the witness, and says he has not asked him anything about why he did not make it, but whether or not the case, as made by him, is like that shown in the Adams patent.)

(Mr. MUSSEY: The question is objected to on the ground that the witness has already answered that it is essentially like the Adams patent, with an exception which he named, and with the hand hold on the top, which he said formed no part of the matter at all.)

X Q. 213. I understand you refuse to answer the question whether or not the case, as shown in the exhibit model, agrees with that shown in the Adams patent.

(Mr. MUSSEY: Objected to for the reason given above. He has answered it several times.)

X Q. 214. And I further understand that the model does not agree in proportions with the parts shown in the Adams patent, and that the front rollers are not arranged in respect to the case as shown in the Adams patent, and that the cross-bars that support

the roller shafts are not of the same construction as illustrated in the Adams patent. I shall leave the matter there unless you can point out that I am in error. I now ask you what the exhibit model was made to illustrate.

A. In other words, you do not want me to pay any attention to what you said you understand.

X Q. 215. I don't care whether you pay any attention to it or not.

A. Then I will. As far as your understanding of the various features mentioned is concerned, if you understand as stated, you do so on your own responsibility, certainly not from any statement I have made. The model in question was intended to illustrate a shelf under the Adams patent.

95 X Q. 216. If you make that model to illustrate a shelf under the Adams patent, why did you not make it like the one shown in the Adams patent instead of making it like something else?

(Mr. MUSSEY: Question objected to, as there is no specific specification for any particular form of book shelf made in the Adams patent, the language of the patent simply being that "the series of my improvements may be constructed side by side with the division between them, forming pigeon-holes like a book-case, which holes may be of any suitable size.")

A. I consider that the shelf is made in all essential features like shown and described in Adams' patent. We made the supporting bars A of metal because from their having been specified in the patent, we considered we had a right to do so, and because it was more convenient for us to make the complete metal parts at metal-work factories before having any wooden parts made.

X Q. 217. Do I understand you that if the shelf is provided with the rollers arranged substantially as illustrated in the patent that you consider it immaterial if the rollers are slightly different in proportion, and if the parts that support them differ slightly in construction, it is immaterial if they support them in the same relation and produce the same result?

(Mr. MUSSEY: Question objected to for the reason that, as has been testified to by the plaintiff's expert, there are no proportions given, and that it is only necessary that the embodiment of the invention is made in such a structure so as to carry out the principles of the invention as illustrated in the drawing and described in the specification.)

(Mr. FOSTER: Counsel for complainant objects to instructions to the witness under the guise of objections, and I ask that the

96 witness be left to answer the question without any hint from counsel.)

(Mr. MUSSEY: Counsel for defendants does not make this for the purpose of instructing an intelligent witness, but for the purpose of showing the impropriety of the question.)

A. I consider it immaterial as to the diameter or length of rollers,

the length or thickness of supporting bars, and the manner of attachment of said supporting bars, the object or result to be obtained as embodying a practical structure made in general conformance to drawing and specifications, or at least the practical features of them being essential features.

X Q. 218. Then apply the same rule to the construction shown in the Hoffman patent, figure 2, and in Exhibit M. R. J., No. 5, Shelf, and the shelf illustrated in figure 17 of the Office Specialty Company's catalogue, and state whether or not you do not find in all of those structures substantially the same arrangement of parts to produce the same result.

A. I do not; the construction of the supporting frame differing very materially, as does also the supporting frame of the Hoffman shelf, as placed upon the market, differ from the construction of supporting frame as shown described in patent.

X Q. 219. I understand you have been examined as an expert in connection with the manufacture of roller shelving, and I therefore have to ask you whether it is important in the manufacture of roller shelving and cases to save space, and whether or not in putting up such cases with roller shelves you do not make the openings as near the actual size of the book as possible?

A. Yes.

X Q. 220. In such shelves, is it not desirable to support the book as near as possible to the bound back, so as to prevent the latter from swelling out and sagging?

97 A. It is.

X Q. 221. And is it not also desirable to avoid rubbing the book against any part of the frame, and thereby abrading the book, and are not the rollers put in for this purpose?

A. Yes.

X Q. 222. After a book has been used for some time, does it not often swell out so as to bind hard in the opening into which it is put and from which it is to be withdrawn?

A. Not when properly made and supported in all parts.

X Q. 223. Referring, again, to the Exhibit Model M. R. J., No. 3, what is the use of those two rollers in front of the shelf? I refer to the actual, practical use.

A. To give support to the front portion of book.

X Q. 224. Then you understand the book is to project beyond the case in order to rest upon the front rollers, as in figure 3 of the Adams patent, do you?

A. I should certainly arrange it so.

X Q. 225. Now, I would like you to state, under your oath, and as an expert familiar with this art, whether or not you would ever recommend to any one to put into practical use the construction illustrated in the drawings of the Adams patent.

A. I should not recommend any such shelf for practical use.

The taking of these depositions was thereupon adjourned until Wednesday, May 12, 1892, at 11 o'clock a. m.

WASHINGTON, D. C., *May 11th*, 1892—11 o'clock a. m.

Met pursuant to adjournment.

Present on behalf of the plaintiff, Mr. Foster; present on behalf of the defendant-, Mr. Mussey.

Whereupon cross-examination of the witness, M. R. JEWEL, is continued—

98 By Mr. FOSTER:

X Q. 226. Referring again, to Exhibit Model M. R. J., No. 3, is it not a fact that, in that model. the spring is bent back a great deal farther than in the Adams patent, where the part that is lettered "E" upon it is nearly in line with the back edge of the roll, thereby admitting the hand further back in the middle than it could go in the structure shown in the drawings of the Adams patent?

(Mr. MUSSEY: The question is objected to for the reason that there is no proportion for the spring shown in the Adams patent.)

A. It does project somewhat further in the model, but this would be obviated were the diameter of the rollers greater in proportion.

X Q. 227. You do not mean to say, in your answers to questions from 25 to 27, that you consider that there is no advantage in putting the hand hold in the roller shelf and that a shelf with a roller extending along the whole front is just as good?

A. I do most decidedly, so far as my personal preference goes; and I invariably recommend the full-length roller.

X Q. 228. Is that the opinion of customers, so far as you know?

A. In about equal proportions, their opinion, in many cases, being influenced by that of the salesman. In other words, his personal influence will influence their personal preference in many cases.

X Q. 229. Why, then, do you make the shelves with the two short front rollers and intermediate hand holds?

A. Simply to give customers the choice—just as we do in regard to files and other devices. So that if any one, for any reason, should suggest that he might like that form (indicating) better, we give him his choice in regard to it.

99 X Q. 230. Has it always been your opinion that the single front roll is better than the divided roll and hand hold?

A. My personal opinion has always been in favor of it.

X Q. 231. If, then, you consider that a shelf with a divided front roll and a hand hold is practically of little use, why do you not stop its manufacture, especially when I make the offer that in case you guarantee to cease the manufacture of this kind of a shelf, this application for an injunction will be withdrawn?

(Mr. MUSSEY: The question is objected to for the reason that it has practically been already answered and for the further reason that it is immaterial and argumentative.)

A. Because the control of the company's affairs does not rest with me personally, and because the preferences of other salesmen and some of the managers of branch offices do not accord with my

view, and because we know the device of the hand hold to be very old and feel that we have a perfect right to make it.

X Q. 232. How long have you known the device of the hand hold, in combination with the divided front roll, to be very old?

A. Since correspondence with Farrelly & Judge, of St. Louis, in December, 1885.

X Q. 233. How long have you known of the existence of a case having shelves like the Richmond, Indiana, shelf?

A. Since April, 1892.

X Q. 234. Were these Richmond, Indiana, shelves in a position that is seen by many people?

A. The public has free access to them daily and hourly during business days, and that has been the case ever since they were first put in place.

X Q. 235. Were the offices in which the shelves were used of such a character that the shelves were likely to be known to those interested in putting up shelves for public officers?

100 A. They are; as to my personal knowledge, the representatives of the Fenton Company have had access to them, as well as our representatives and others.

X Q. 236. So far as you know, did the representative of the Fenton Company have access to these shelves before the filing of the Hoffman application, in 1887?

A. I know nothing as far back as the date mentioned, but do know of their having visited the court-house in connection with a job near Richmond within the last two years.

X Q. 237. What is the difference in the functions, so far as permitting the introduction and withdrawal of books and the supporting of books, between the shelf M. R. J., No. 5, and the shelf figure 17 in the Office Specialty Company's catalogue; is there any practical difference?

A. The difference is only in the construction of the frame.

X Q. 238. Then there is no difference in the function, so far as supporting and permitting the insertion and withdrawal of books. Is not that so?

A. That is so, and it will apply equally as well to the Richmond shelf.

X Q. 239. Each of these shelves referred to in my previous question consist of two parts: one the frame and the other the rollers. Is not that so?

A. It is.

X Q. 240. In each the journals and rollers are supported by parts of the frame. Is not that so?

A. By parts attached to the frame—in the latter shelf.

X Q. 241. Do you mean to say that in shelf M. R. J., No. 5, the extensions of the side bars that support the outer journals of the rollers are not parts of the frame?

A. I do not, as they plainly are.

X Q. 242. And are not the projections from the cross-bars that support the inner journals of the rollers also parts of the frame?

101 A. Not parts of the supporting frame proper, but attachments intended only to support the inner end of the outside rollers.

X Q. 243. If I were to take away the rollers, would not all that was left be the frame of the shelf, and would it not be so called by everybody skilled in the art; and do you not, in your shop or factory or office, call these parts the frame?

A. If the front rollers were taken away there would be no necessity for the other parts.

X Q. 244. I said all the rollers. I did not say the front rollers.

A. It might be so considered.

X Q. 245. Is it not a fact, within your own knowledge, that all of the parts of that structure, M. R. J. No. 5, except the rollers, constitute and are called the frame of the shelf?

A. There has been no occasion before to consider it in that connection, but, certainly, without the front rollers there would be no necessity for supporting attachments of any kind.

X Q. 246. That may be an interesting statement to yourself or to somebody else, but it does not answer my question. I therefor- will ask the examiner to repeat it and ask for a categori-al answer.

(The question was thereupon repeated as follows:)

"Is it not a fact, within your own knowledge, that all of the parts of that structure, M. R. J. No. 5, except the rollers, constitute and are called the frame of the shelf?"

A. Treating the frame structure as entirely separate, I should say yes.

X Q. 247. And the part of the frame that supports the inner end of the front rollers is a retreating part, permitting the hand to pass back of the front rollers. Is that not so?

A. It is not so. Instead of retreating they project forward.

102 X Q. 248. Is the part of the frame Fig. 17 Office Specialty Company's catalogue, that supports the inner end of the front rollers a retreating part of the frame?

A. It is not, but the bar to which it is attached is.

X Q. 249. And in the drawings that accompanied the application of Jewell & Yawman for a patent is the part "*e*," Fig. 3, a retreating part of the frame?

A. It is not.

X Q. 250. And yet you called it a retreating part in your specifications, when you applied for a patent. You claimed it as a retreating part and you spent probably several thousand dollars in contesting an interference on the ground that it was a retreating part. How is it now that you do not consider it to be a retreating part of the frame?

(Mr. MUSSEY: The question is objected to unless the application itself is shown to the witness.)

(Mr. FOSTER: Counsel for the plaintiff states that the Patent Office refuses to furnish a copy of said application without the consent of the defendants and asks whether such consent will be given. Does counsel decline to furnish it?)

(Mr. MUSSEY: Counsel does not decline to furnish it, but says he supposed he had a copy of the patent. He finds that he has not, but will have a copy of it if he can get one.)

(Mr. FOSTER: Counsel for the plaintiff reads from the specifications of the Jewel & Yawman application, a copy of which is already in evidence, as follows:)

"In this second form of device the journals are formed on the frame and projected into the end of the roll."

Original claim 5 reads:

"The front roller, divided centrally into two coincident sections supported by a retreating bar or support, *e*, whereby the admission of the hand between the roller section is permitted to grasp the book."

103 A. I had nothing to do with dictating the terms used in the specifications, and it is plain that it would have covered the point equally as well to have called it a projecting part in half oval form.

X Q. 251. Then so long as the parts between the rollers extend back to permit the hand to pass back of the rollers it is immaterial whether you call it a retreating part or a projecting part; is that so?

A. In form 17 the front bar of the frame proper is unquestionably a retreating part. In form No. 5 it is not.

X Q. 252. Then why was it, when you were examined in the interference case in the Patent Office and asked whether you had invented, in connection with Mr. Yawman, a shelf in which the front roller was in two separate sections, the intermediate parts carried back to permit the admission of the hand, that you claimed to have invented that thing and did not state that there was no intermediate part carried back in the structure shown in your application?

A. Because at that time I did not have the opinion of patent examiners in regard to 1886 shelf to guide me as I now have.

X Q. 253. Then you understand, now, after being informed by the patent examiners, that the 1886 shelf does not have any intermediate or retreating part carried back to admit the hand. Is that so?

A. I understand that we showed clear priority to a shelf with straight front bar having short rollers attached by supports projecting forward.

X Q. 254. Then you understand, now, having been informed by the patent examiners, that the 1886 shelf does not have any intermediate or retreating parts carried back to admit the hand. Is that so?

A. It is; but the space between rollers, as in the 1886 shelf, admits the hand equally as well as though it were carried back.

104 X Q. 256. Referring to shelf M. R. J. No. 5, does the fact that the bent-back portion is divided into two parts, in that frame, while in Fig. 17 of the Office Specialty Company's catalogue that part is in one part, have any bearing as regards the question whether that part is carried back; or in other words, would it be

any more carried back if that part was one piece than if it were in two pieces?

A. I do not think it would necessarily. The reason for making the bracket in the form shown is that we may, on different-length shelves, use different-length rollers, and the part could be made in one piece, if necessary.

X Q. 257. If the centre of a book was grasped with one hand, as it must be in order to raise it and move it, and the book was then pushed upon the shelf M. R. J. No. 6, and pushed back with the crease back of the front rollers, would the hand come in contact with the front bar of the frame or not?

(Mr. MUSSEY: The question is objected to as involving an hypothesis which is not in accord with the facts, to wit: That in inserting a book on a roller shelf the book is grasped with one hand.)

A. Your statement that the book must be grasped with one hand to be placed into position is exactly contrary to the fact which is: that in practical use it but rarely, if ever, except in the case of very light books, is put in place by one hand.

X Q. 258. If the centre of the book was grasped with either one or both hands in such a manner as it must be grasped if it is lifted and put upon the shelf, and the book was then put upon the shelf of M. R. J. No. 6, and pushed back without changing the position of the hand or hands until the crease was back of the rollers, would or would not the hand or hands make contact with the front cross-bar?

105 A. It would; but such an insertion would be impossible where the rule in use by us, and before fully explained, of having the book stop at a position which does not admit of the front roller going as far as the crease is followed. The same statement would be equally true if the book be allowed to be inserted in the same manner—with the hands in certain positions on the book—with the Hoffman shelf, as placed upon the market, and with our shelf, M. R. J., No. 5, except that in the latter case the hands would come in contact with the roller—I mean that if you put your hand on either side of that space (indicating) it is bound to strike either the bar or the roller.

(Mr. FOSTER: All the answer of the witness after the words "it would" is objected to as irresponsive to the question.)

X Q. 259. Assuming the other parts of the frame to be the same, am I right in understanding you to say that it costs more to make a shelf with two separate front rollers and intermediate space than a shelf with a continuous front roller without any space?

A. You are.

X Q. 260. Am I right in understanding that an important feature of the shelf like M. R. J., No. 5, is the fact that it can be manufactured by machinery at a slight cost and be put upon the market with the supporting frames complete for use?

A. You are; but frames No. 16, shown in the catalogue, is manufactured at a still less cost.

X Q. 261. Shelves of such a character so manufactured by machinery with their supporting frames complete for use and adapted to be screwed or bolted fast in the case constitute articles of manufacture and sale, in themselves, do they not?

A. They do.

106 X Q. 262. You have called the Office Specialty Company's catalogue exhibited in this case an old catalogue for the year 1889 catalogue. When was the next catalogue issued, if you know?

A. Within the past month. That bears the date either of May or June, 1892.

X Q. 263. Did the Jewell & Yawman application ever go to patent?

A. No patent has ever been issued yet; no, sir.

X Q. 264. Since the issue of the Hoffman patent, has any sample like Fig. 17, Office Specialty catalogue, been exhibited for the purpose of soliciting orders or have they been used in soliciting orders for shelves made by the Office Specialty Company?

A. Within a few days after such issuance, all samples were instructed to be withdrawn in that form, but we have since ascertained that one shelf remained in the Washington office here on exhibit for some time afterwards, although it was not known to the company at Rochester until attention was called to it.

X Q. 265. Since the issue of the Hoffman patent, and until within the last three months, have not what you call the 1889 catalogue been used in soliciting orders for shelves made by the Office Specialty Company?

A. They have, but samples of shelves have invariably been of the latest kind. We at once commenced work on the new catalogue, and engravings and other matter for the same were completed as soon as it could well be. Very few, if any, shelves are sold direct from the catalogue.

The further taking of these depositions was thereupon adjourned until May 11th, 1892, at 1.30 o'clock, p. m.

WASHINGTON, D. C., *May 11th*, 1892—1.30 o'clock p. m.

Met pursuant to adjournment.

107 Present on behalf of the plaintiff, Mr. Foster; present on behalf of the defendant-, Mr. Mussey.

Redirect examination by Mr. MUSSEY:

R. D. Q. 266. Referring to Exhibit M. R. J., No. 3, which you testified to as being made under the Adams patent, I understood you to say, on cross-examination, that this oval recess or hand hold on the top of the case was not intended to be a part of the exhibit?

A. It was only put there for convenience, the same as if there had been another shelf with a recess above it.

R. D. Q. 267. You have referred to this Exhibit, M. R. J.,
Curtin. No. 3, as being made under the Adams patent. Were any directions given in relation to the making of it, or how did it come to be made?

A. We thought it desirable to have a model made in that form, and a pencil sketch made from the drawings shown in the Patent Office Gazette was turned over to a mechanic in the factory, and he was simply told to use such rollers as were already made, as we were in a hurry for the model.

R. D. Q. 268. Referring to this Adams patent, No. 338,459, I desire you to examine the specifications and state whether that specification calls for specific proportions.

A. I find nothing whatever as regards measurement or proportions.

R. D. Q. 269. For what purpose was the casing that encloses the bars and other parts of the Adams patent structure made?

A. Simply to get it in shape so that it could be used to rest a book upon and show the operation. In fact, the case part was added to it after the shelf proper was brought from Rochester.

R. D. Q. 270. You were questioned as to the supports shown in figure 3 of the drawings of the Adams patent, marked "B,"
108 and to which bars A are secured by means of screws. Are they, in your judgment as a mechanic, mechanical equivalents for the method in which these bars are secured in this case (referring to M. R. J., No. 3).

A. They are.

R. D. Q. 271. Are these supports, as shown in that drawing, essential features of the Adams patent?

A. They are, and they are plainly shown in figures 1, 2 and 3.

R. D. Q. 272. But I understand you to say that in practical working anything that subserves the same purpose or function of holding this together is as good as the supports?

A. It is, in my opinion.

R. D. Q. 273. Do you find, then, in that Adams patent, anything that specifies the strength of the spring on which the spring rollers are placed, or the extent to which those rollers and that spring may be opened?

A. Nothing whatever.

R. D. Q. 274. Is there not a proviso in the specifications that that spring may be extended or contracted to correspond with the width of the position?

A. There is.

R. D. Q. 275. Supposing that you were to take out of this case so much of the structure of the Adams patent as is shown in this exhibit (M. R. J., No. 3), how would you secure these large wooden bars (B B) together?

A. Do you mean in case you were to attach it in some other manner?

R. D. Q. 276. Supposing that you were to take off the whole casing and simply use the shelf part?

A. It would not be necessary to connect them together further than they are in the exhibit, as it would make a complete shelf without anything additional.

R. D. Q. 277. In answer to cross-question No. 35 you stated that

the supporting frame of the Hoffman shelf, as placed upon
109 the market, differs from the construction of the supporting frame as shown and described in the patent. Referring to the shelf which Mr. Foster has loaned me (marked "Exhibit Hoffman Frame"), please state wherein you see such differences of construction.

A. The principal difference I notice is that, as shown in figure 2 of the patent, the central section of the frame is formed of a continuous bar riveted at the ends to cross-bar running full length of shelf; but being formed in one continuous piece from back to front with a connecting section at front, recessed back. It is plain to me that such a structure would be mechanically weak at the front. It is doubtless for that reason that shelf as placed on the market, as shown in exhibit marked "Hoffman frame," has the front bar in one continuous piece the full length of the shelf.

R. D. Q. 278. Are there any other differences of construction that you notice?

A. No other essential ones.

Recross-examination by Mr. FOSTER:

Re-X Q. 279. Does not the Adams specification state that the invention consists of novel details of construction "illustrated in the accompanying drawings," on lines 13 and 14; and that the spring E is shaped "as shown in figures 1 and 2," line 43, and claim 1 makes a claim for the parts "substantially as herein shown and described" and claim 2, for the spring, "substantially as shown and described," and does not that indicate to you the fact that Mr. Adams considered that the manner in which his invention was shown illustrated said invention?

A. It does; but it is well known in practice that mechanical modifications and variations are almost without exception made from drawings and descriptions shown in the patent.

110 Re-X Q. 280. And that would be the case in making a shelf under the Hoffman patent, would it not?

A. Undoubtedly so.

Re-X Q. 281. The Hoffman patent states that the spring E may be applied "to lids of match, tobacco and other boxes to open them." That is simple nonsense, is it not?

A. It is. I do not see how that has any bearing upon a book shelf whatever.

Re-X Q. 282. Do you consider that the Adams construction is adapted for use where there is a series of receptacles, side by side, as in ordinary book-cases?

A. It is, or could easily be made so.

Re-X Q. 283. If there were two receptacles, one on each side of the one shown in Exhibit M. R. J., No. 3, on a line therewith, as in ordinary book-cases, you could not secure the bars B B to the partitions in the manner in which they are secured in the exhibit, could you?

A. No; but I could easily secure them in at least a dozen different,

easy, mechanical methods which I can enumerate, if desired. I can enumerate at least a dozen right off-hand.

Re-X Q. 284. Suppose you made a shelf like what you call the Adams shelf exhibit, consisting of the metal bars and the rollers and the spring, and these rollers (indicating) and the two wooden bars B B. State, under your oath, whether you believe that such a shelf would find any purchasers if put upon the market?

A. I certainly believe it could, as I have seen examples of shelves sold by the thousands which appeared to me entirely impractical and almost ridiculous—for instance, the Wundt.

Re-X Q. 285. Then, under your oath, you say you believe you could sell in the market one hundred of the shelves like that exhibit model, except the case, in the ordinary course of business?

A. I have no reasons to doubt it.

111 Re-X Q. 286. Is the rest of your testimony as true as the last statement?

A. Fully so.

Re-X Q. 287. Then you would simply expect to sell those because you know that other shelves that are impractical and ridiculous have been sold. Is that it?

A. That is not the reason. The shelf, as shown in the exhibit, is in many respects superior to the shelves sold for several years by Hoffman.

MAJOR ROMEYN JEWELL,
By the Examiner by Consent.

The testimony of this witness having been taken in shorthand, it is hereby stipulated by and between counsel that the examiner may sign the deposition.

The further taking of these depositions was thereupon adjourned until Thursday, May 12th, 1892, at 11 o'clock a. m.

WASHINGTON, D. C.,
THURSDAY, *May* 12, 1892—11 o'clock a. m.

Met pursuant to adjournment, at the office of R. D. Mussey, Esq., Washington, D. C.

Present on behalf of the complainant, Mr. Edwin H. Brown; present on behalf of the defendant-, Mr. R. D. Mussey.

Whereupon WILLIAM W. DUDLEY, a witness of lawful age, called by and on behalf of the defendant-, having been first duly sworn, is examined by Mr. Mussey:

112 Q. 288. Have you had anything to do with the fitting up of the court-house at Richmond, Indiana?

A. Yes, sir; the temporary court-house which was built there in 1872 or 1873. When the records of the county were removed from Centerville to Richmond, I was clerk of the courts and I drew all the designs for the fitting up of the clerk's office. It became necessary to put up a temporary court-house, which was built of brick, and I drew the design of the court-house; that is, the ground plan

of it and the arrangement of the rooms, and I also drew sketches for fitting up my own office.

Q. 289. What was your occupation at that time?

A. I was clerk of the courts. I was clerk of the court for eight years.

Q. 290. Please look at Exhibit M. R. J., No. 1, and see if you recognize that form of shelf?

A. Yes, sir; I do. That is almost identically the design of a shelf that we used for our judgment dockets and other books of constant reference. This idea (indicating the roller) is exactly the idea we use.

Q. 291. Whose design, do you remember, was that front roller?

A. It was my own design. It grew out of an effort I had made to keep all my records, which were bulky and heavy, on their sides instead of on their ends. In the old court-house at Centerville I had some shelving made and found that the edge of the shelf was wearing the sides of the binding, so it was my own idea to put this roller in here to prevent that wear and make the books slide in and out more easily. I think for some of the books I have had a second roller put in further back to accomplish the same purpose.

Q. 292. It was testified on yesterday that that shelf was taken by permission from the clerk's office by the gentleman who took it?

113 A. Yes, sir; I would be almost willing to swear that they came from that office. It looks very familiar to me.

Q. 293. Had you ever seen these front rollers used before that time?

A. No, sir; I never had.

Q. 294. So it was your own design of putting in the front roller?

A. It was my notion to relieve the wear on the books in some way—to relieve this pressure here (indicating). I perhaps consulted with my deputies and clerks about it, and perhaps it may have been the suggestion of one of them as well as my own, but it was simply a device for relieving the wear on the books.

Q. 295. You have never seen it prior to that?

A. No, sir; I had never seen it prior to this. It was an experiment. I tried to have the recorder's office and the auditor's office where the tax records were use the same device, but they thought it was something of an experiment and did not see the good of it and always kept their books on their ends. I found that the books would wear much better and were not racked out in taking them out. The stiff calendared paper that records of that kind are made of, and the stiff card-boards that they are bound in, brought about such a sagging of the body of the book that it rested on the shelf where they sit up on end, and the books in fitting closely together would warp the paper and make it difficult to write on and always injured the binding of the books, which would sag away from the backing. But after we adopted this method of keeping them on their sides and this roller plan to prevent their wearing when pulled out and in, everybody liked it very much, and the books were preserved and lasted much longer.

Q. 296. Your recollection is, that in some of the shelves you had rollers fitted up?

114 A. Yes, sir; I think on some of the larger books there was a roller let right in here so that the book would slide in and out easily. You know what a judgment docket is. It is a large, heavy book, and attorneys were coming in constantly and using them, and they were in and out of the shelves all the time. They had to be put in the vault, because our room was a temporary structure and was somewhat contracted, and we had to make use of all the room we could. I had these put into a centre table, and all around the table it was fitted up with these kind of shelves, and they pulled the book right out and laid it on the table.

Cross-examination by Mr. BROWN:

X Q. 297. How long was that temporary court-house used?

A. It is still used. They are now erecting the permanent structure there. It was built on one corner of a lot which was donated by the city of Richmond to the county for the purpose of a court-house, and the removal of the county-seat created a good deal of disturbance and the structure was put up very quickly. One corner of the lot was laid out and the building was erected on this corner.

X Q. 298. No part of the building is yet in use?

A. I do not think they are using them. They were not the last time I was there.

Redirect examination by Mr. MUSSEY:

R. D. Q. 299. These books were accessible to the public?

A. Yes, sir. They were right in the principal vault of the clerk's office.

WM. W. DUDLEY.
By consent.

Subscribed and sworn to before me this — day of May, A. D. 1892.

—— ——,
Examiner in Chancery.

115 WILLIAM C. DODGE, a witness of lawful age, called by — on behalf of the defendant-, having been first duly sworn, is examined by Mr. Mussey.

Q. —. Please state your name, age, residence and occupation.

A. My name is William C. Dodge; residence, Washington, D. C.; age, sixty-four years; occupation, solicitor of patents and mechanical expert.

Q. 301. What experience, stated briefly, have you had as mechanical expert?

A. In the first place, I was familiar with mechanics and worked in a shop when a youth, and in 1861 was appointed examiner in the Patent Office, which position I resigned in 1864 and engaged in my present business, which I have pursued ever since, and during

which latter period I have testified as expert in something like 200 patent suits, embracing a great varity of mechanical devices. During my business experience I have prepared applications for and secured patents on several thousand inventions, twenty of my own, and have been employed by several of the largest manufacturing concerns in the United States to advise them with reference to infringements and as to what patents it was necessary for them to buy in conducting their business, and which, necessarily, made me familiar with the mechanical devices and operations carried on by these different concerns, being obliged frequently to visit their factories and consult with them.

Q. 302. When did you first become acquainted with that particular form of shelving known as roller shelf?

A. The first knowledge that I had personally of the existance of a device of that kind was when I went into the Patent Office,
116 in 1861, as a draftsmen's room was fitted up with roller shelves for supporting the folios which contained the drawings.

Q. 303. Did you have frequent occasion to consult these drawings—I mean these drawings on these roller shelves?

A. Yes, sir; I used them daily in making examinations. It was a part of my business.

Q. 304. What was the character of those roller shelves?

A. Each shelf was composed of a series of rollers, journaled in strips of wood, which strips of wood rested in gains or grooves in the upright partitions.

Q. 305. Rested in what?

A. In gains or grooves cut in the upright partitions and were set in there loosely so that they could be drawn out bodily or shoved in whenever it was necessary. I have here a pencil sketch showing a front view and also a side view of them as they existed when I went into the Patent Office, in 1861, and they had been there for some years previous to that—how long I do not know—and for some years afterwards, until they were replaced by the present tipping drawers.

(Said paper, being the pencil sketch referred to, is filed herewith, marked "Exhibit W. C. D., No. 1.")

By Mr. MUSSEY:

Q. 305. Of what were those rollers composed—of iron or wood?

A. Of wood—hard wood.

Q. 306. And of what size were they; do you remember?

A. I should say they were about 2 or 2½ inches in diameter and of a length corresponding to the length of the folios, which were 2 feet or over.

Q. 307. In your acquaintance with these shelves and rollers, did you notice any sagging of the rollers under the weight of those folios?

117 A. There was none, unless, perhaps, some may have been warped, but they did not sag from the weight. I never observed any sagging.

Q. 308. Did you ever meet with any difficulty in inserting or withdrawing the portfolios from off those roller shelves by reason of the jamming of the fingers against the shelf?

A. I never did.

Q. 309. Did you ever know of any such instance?

A. I did not.

Q. 310. Was there, or not, any abrasion or injury of the portfolios by reason of such insertion or withdrawal?

A. No; nothing except the ordinary wear from long use.

Q. 311. There is involved in this case a question of a hand hold in connection with roller shelves, which I take to be a recess, or which may be generically described as a recess of an oval or equivalent shape near where the book is introduced or taken out. Have you ever seen such hand holds in use in shelving?

A. I have—ever since I can remember. It has been customary in book-cases for the storage of large books to make in the vertical partitions such recesses for the purpose of enabling the book to be taken out by the hand—to withdraw it and replace it. And it has also been common to make a similar recess in the edge of the horizontal shelves in desks for the storage of papers, blanks and the like. I have in my office a desk in which there are four horizontal shelves having such recess in them, which desk has been in my possession at least 20 years and was second-hand when I bought it. I have hear a sketch showing these two forms of recess. The upper one, showing the vertical partition and the lower one representing the horizontal shelves in my desk.

(Said paper, being the sketch referred to, is filed herewith marked "Exhibit W. C. D., No. 2.")

118 Q. 312. Have you examined the state of the art in respect of the combination of roller shelves and hand holds or grasps?

A. I have, so far as the patents and various exhibits involved in this case are concerned.

Q. 313. Now, in view of such examination into the state of the art, I wish you would look at this patent of Hoffman's, upon which suit is brought here, No. 450,124, and state what you find as the essential features of that device.

A. I have previously examined the patent referred to and I understand the second claim to call for the combination in a book shelf of a supporting frame, a series of horizontal rollers, the front roller in two separated sections, the intermediate part of the frame being carried back or curved to form a hand recess. As I understand that claim, in view of the state of the art and of the record of the case in the office, which I have examined, to be limited to forming the recess for the hand by a curve in the front bar, and that if the recess be formed in any other manner than by the curvature of the front bar, it would not be covered by this patent. That is as I understand it.

Q. 314. As I understand, you say your opinion, in view of the

state of the art and of the records of the case, limits the patent to the precise feature described by you?

A. It does, in my opinion.

(Mr. BROWN: Objected to as incompetent, the question of the discovery of the patent being one for the court.)

Q. 315. Look at this Exhibit, M. R. J., No. 5. Does that embody the structure covered by the claim of the patent to which you have just referred?

A. In my opinion, it does not, because in this Exhibit, M. R. J., No. 5, the front bar of the frame is straight and the two front rollers are sup-orted at their inner ends by brackets rivited to this front, straight bar; hence, there is no hand recess formed by the
119 curvature of the front bar in this exhibit, and, for that reason, in my opinion, it would not come within the scope of the second claim of the Hoffman patent when read in connection with the specification of the same and considered in connection with the prior state of the art.

Q. 316. Have you examined the Adams patent, No. 338,459?

A. I have.

Q. 317. Please state what that shows in relation to a recess or hand grasp and rollers at the front of the structure.

A. This Adams patent shows and describes a frame or shelf for the support of books, provided with rollers upon which the book rests when in position, and with two rollers at the front, with a hand recess between them, essentially the same, so far as its operation and results are concerned, as the hand recess in the Hoffman patent.

Q. 318. Examining the specification of that, do you find any requirement of proportion or measurements?

A. I do not, and such requirements seldom or never occur in a patent. The requirement of the statute in that respect being, that the inventor shall give such a description and illustration of his invention as will enable persons skilled in the art to which it belongs or most nearly pertains to construct and use the device, whatever it may be; and the great majority—in fact, the great mass of patents, are taken out before the device is constructed on a working scale for use and hence are seldom, if ever, made to a scale. The only instance in which a patent drawing represents the device or machine in proportion or scale is where the patent is taken out after the machine has been built for practical use, and which, as I before stated, very seldom occurs. In my business as a patent solicitor I find that in 99 cases in a hundred, we are furnished only with a very crude model, and now, since models have been abol-
120 ished in the Patent Office, only with rough sketches from which to work up the description and drawings, to illustrate the inventor's idea.

Q. 319. Before we pass from that Adams patent, let me ask you whether, with the exception of this recess here marked "R" that has been testified to as inadvertently placed there, this Exhibit, M. R. J., No. 3, is a fair representation of the Adams patent?

A. Yes; I should say it is a fair representation of it. It differs in some little details, but not materially. As, for instance, the support of the front roller is not bent upward quite as much as in the drawing, but that makes no material difference. It is not a matter of any importance or consequence, in my opinion.

Q. 320. It was a subject of some criticism yesterday, on cross-examination, as to the fact that the Adams patent showed an attachment "E" by which the bars "A" were held against the sides of the case. Is the device shown here an equivalent to that?

A. Fully so, I should say, because it is perfectly immaterial how the shelf or its supports is attached to the body of the case. There are a dozen different mechanical ways which persons might adopt at will, as they in no manner affect the operation or result of the device. In fact, so far as I can see, the bars "B" in the exhibit seem to be secured to the case in the same manner as represented in the drawings so far as the drawing represents the manner of securing them. The drawing, figure 3, is simply a vertical section view, showing the position of the supporting bars "B," and neither that figure nor figures 1 and 2 shows the means by which those supporting bars are attached to the body of the case. They may be held by screws put through the sides of the case into the ends of the bar, or there may be a recess formed in the sides of the case in which the ends of the bars rest. There is nothing in the patent to show which plan is used, and it is not necessary that there should
121 be, because, as I have before stated, every person or mechani who constructs such a device is at liberty to use any known means for that purpose. That constitutes in this case no part of the invention.

Q. 321. Look at this exhibit shown here marked "Exhibit M. R. J., No. 6." Does that show two rollers at the front of the shelf?

A. I have examined the exhibit previously, as well as now, and it does show two short rollers at the front, one at each side, with a recess or space between them.

Q. 322. Does this exhibit subserve the same function as the Hoffman patent sued on?

A. It does. It is designed for the same use, and is used in the same manner and for the same purpose.

Q. 323. You were speaking some time ago about the fact that patents were frequently granted on applications before they were reduced to practical embodiment and that it was customary to modify, for the purpose of making a practical structure or device, the drawings, &c., given in a patent. I wish you would look at this exhibit, marked "Hoffman Frame," which has been introduced as the style of frame put upon the market under the Hoffman patent No. 450,124, and see if is corresponds or not exactly with the drawings.

A. I have examined the frame referred to and I find that it does not correspond accurately with the drawings in the Hoffman patent. In the Hoffman patent the drawings show the front bar, in which the hand recess is formed, to be a continuation of the two central bars which support the inner ends of the rollers, said bar being ben

back at right angles at each side of the hand recess and carried back and riveted to the rear bar of the frame or shelf. In the Exhibit Hoffman Frame the front bar, in which the recess is made, continues from each side of the recess straight across the front of the
122 frame instead of being carried back. In the Exhibit Hoffman Frame the four cross-bars are reduced at their front ends and made to project through holes in the front bar, and in these projecting ends of these cross-bars, the front rollers are mounted, while in the drawings of the Hoffman patent the front rollers are shown as being journalled at their inner ends in the same bar in which the hand recess is formed and at their outer ends, in the outer cross-bar, the journal being inside of the lateral portion of the outer cross-bar, which is also bent at a right angle to reach the side of the case.

Q. 324. Please look at that Exhibit Hoffman Frame and the Exhibit M. R. J., No. 5, and state which, in your opinion as a mechanical expert, is the superior frame.

A. Mechanically considered, I should say that the shelf shown, marked "Exhibit M. R. J., No. 5," was the better frame of the two, because it is stronger and less liable to sag in the center. It is braced by the angling position of the rear bar. I would not, however, think that there was any very material difference between them when firmly secured in place in the case, while I should give the preference to Exhibit No. 5 if I were going to select.

Q. 325. It was testified to here on behalf of the plaintiff that a hand grasp or hold was of importance in putting books upon the shelves. How is that, in view of your experience and of your judgment?

A. The hand recess is of very little consequence in putting the book upon the shelf. The books used with this class of shelves are generally very large and heavy books, and they are invariably taken up by the two hands near the ends, and the edge of the book placed on the front roller and the book then shoved back into its position. The principal use of the hand recess is in withdrawing the book from the shelf as a means simply of taking hold of the book to pull it partly out, when the hands are shifted again
123 to the ends and the book taken out. That is the usual method and the natural method.

WILLIAM C. DODGE,
By Consent.

Cross-examination waived.

The further taking of these depositions was thereupon adjourned to Friday, May 20, 1892, at 11 o'clock a. m.

Subscribed and sworn to before me this 15th day of October, 1892.

WM. HERBERT SMITH,
Examiner in Chancery.

WASHINGTON, D. C., *May* 13, 1892—1 o'clock p. m.

Met pursuant to adjournment, at the office of Gen. R. D. Mussey, 470 Louisana avenue.

Present on behalf of the complainant, Mr. Foster; present on behalf of the defendants, Mr. Mussey.

Whereupon, MAJOR ROMEYN JEWELL, is recalled for further examination, by Mr. Mussey:

Q. 326. You were examined on the 10th instant in relation to the Adams patent in connection with the point *c* for the purpose of retaining in position the ends of the bars of wood or iron resting on the supports B B. I wish you would look once more at that patent and see what is said in that in respect of that feature of the point *c*?

A. Upon careful re-reading of the specifications, I discover that there is evidently no intention to have both the point *c* and screws used at the same time, the exact language of the patent being as follows:

124 "A designates bars of wood or iron having their ends resting upon supports B B so as to permit of their being moved laterally, and having their outer ends provided with a point *c*, to retain them in position, or after the bars A A are adjusted to their position they may be secured by screws."

Q. 327. Are you acquainted with James W. Hine, of Jamestown, New York?

A. I have been personally acquainted with him since, as near as I can now tell, July or August, 1886.

Q. 328. Were you and Hine connected in business at that time or associated with any firm or company together?

A. The firm preceding August, 1886, was Schlicht & Field. At that time an incorporated company was formed, under the name of the Schlicht & Field Company. I was with both firms mentioned and the ones preceding them in connection with the same business in which I am now employed; and Mr. Hine was in the employ of the second-named company at least, or more strictly speaking, in the employ of one of their branch companies—the one located at Chicago, being under the name of the Western File and Index Company.

Q. 329. How long was he so connected; do you know?

A. I am not certain whether he was connected with the business there before the formation of the Western File and Index Company; but he was with that firm or branch up until the first part of February, 1887.

Q. 330. Do you know whether during that connection he sold any roller shelves having metallic frames with straight rollers extending the whole length of the shelf?

A. I am sure he took a number of orders for them.

(Mr. FOSTER: The foregoing question and answer objected to as incompetent and immaterial.)

125 Q. 331. You testified to certain experimental shelves having been made by your company, as I now recall it, some

time in 1886. Do you know whether he had access to those experimental shelves?

A. Not to the experimental shelves themselves, perhaps; but I do know that in August, 1886, we changed the form of shelf we had on the market, and which up until that time had a bar in front of the front roller, and placed the roller at the complete front of the shelf. I know that through the manager of the Chicago office he was furnished with samples of the shelf; was given reasons for the change; was given arguments to use in favor of the shelf as changed, and against the Hoffman shelf as then upon the market; and it has always been my firm conviction that it was at the suggestion of Mr. Hine, after severing his connection with the Western File and Index Company, in the first part of February, 1887, that Hoffman made the change in his shelf, which was done by simply extending the length of bars running to the front, having them project through the front bar, and attaching to the lugs thus formed the front rollers. I was particularly confirmed in this belief from the fact that the date given as the invention of the Hoffman shelf, as patented under No. 450,124, was, if I remember rightly, about the middle of February, 1887, or within a few days after Mr. Hine had made a business connection with Mr. Hoffman.

(Mr. FOSTER: This answer is objected to as incompetent and immaterial.)

Q. 332. You have mentioned that the catalogue, which has been referred to in the testimony in this case, of 1889, containing the figure 17, &c., has been supplanted by a new catalogue. Please look at the paper now shown you and state whether it is the new catalogue that you mentioned.

A. It is.

126 (Said catalogue is thereupon offered in evidence by counsel for defendants, and the same is filed herewith, marked "Exhibit M. R. J., No. 7.")

Cross-examination by Mr. FOSTER, *de bene esse:*

X Q. 333. The Office Specialty Manufacturing Company was the successor in business of the Schlicht & Field corporation, was it not?

A. Yes, sir.

X Q. 334. You have referred to the shelves that were made by the Fenton Company like the construction shown in the Hoffman patent, where the retracted portion is part of a bar that is to the back. Now, do you not know that large numbers of these were put upon the market and erected for use?

A. I have never seen a single one of them to my knowledge.

MAJOR ROMEYN JEWELL,
By the Examiner by Consent.

(Mr. MUSSEY: Counsel for defendants gives notice that he will file, as soon as he receives it, a copy of the file-wrapper and contents of

the Jewell & Yawman application, and also of the evidence taken on the interference between Jewell & Yawman and Hoffman.)

CHARLES E. BIRCKHEAD, a witness of lawful age, called by and on behalf of the defendants, having been first duly sworn, is examined by Mr. Mussey:

Q. 335. Please state your name, age, residence, and occupation.

A. Charles E. Birckhead; 36 years; 1618 7th street, N. W.; present occupation, manager of the Office Specialty Manufacturing Company for Washington.

127 Q. 336. Prior to becoming such manager, what was your occupation?

A. Assistant manager of the office.

Q. 337. And prior to that?

A. I am a cabinet-maker by trade. Just prior to that I was in the furniture business.

Q. 338. It has been testified to here by several parties that there were formerly in the Patent Office a large number of shelves with rollers upon them for the purpose of supporting portfolios of drawings. Do you remember to have seen any such shelves, or do you know anything about it?

A. I think not in the Patent Office.

Q. 339. In any other public office?

A. Yes, sir; I have seen them in the Navy Department—wooden roller shelves.

Q. 340. Please describe them.

A. The rollers were about two feet six inches long by two inches in diameter, and probably six for one book to rest upon.

Q. 341. How long ago did you see those?

A. Fully ten years ago, sir.

Q. 342. Do you know if they are still in use there?

A. No, sir.

Q. 343. As cabinet-maker, were you ever called upon to make hand holds or recesses or grasps in a shelf or shelving, for the purpose of facilitating the withdrawing of a book?

A. I have been.

Q. 344. And of what character—horizontal or vertical.

A. Both.

Q. 345. In what numbers—large or small.

A. Both. I have made a very large number of them. Sometimes we would take an order for, say, ten; another case might have a hundred in it.

128 Q. 346. How long ago was that? How long ago do they date back, to your knowledge?

A. Well, fifteen years.

Q. 347. Were any of these, so far as you know, connected also with a series of rollers for the book to rest upon in being withdrawn or pushed in?

A. Do you refer to the hand hold or opening?

Q. 348. Yes.

A. No, sir.

145 (Copied.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Jan.* 13, 1888.
Mailed " " "

Storage cases for books, &c. Filed Feb. 12, 1887. No. 227,363.

H. J. Hoffman, care Elias H. Bottum, Milwaukee, Wis.:

Claim 1 is rejected for the reason that, adjustable shelves being common, there is no invention in applying to such a shelf the rollers shown in patent to Conant, Apr. 21, 1885, No. 316,241, book-cases.

Claims 3 and 4 are rejected on the patent to Conant above cited, as there is nothing patentable in making the shelves of iron instead of wood. See also each of the following references:

Judge *et al.*, Aug. 12, 1884, No. 303,291, book-cases.
Adams, Mar. 22, 1886, " 338,459, " "
Reed, Mar. 22, 1887, " 359,691, book shelves.

OSCAR WARDWARD, *Examiner.*

146 Room 249.

App. of Horace J. Hoffman. "Storage cases for books, etc." No. 227,363. Filed Feb'y 12, 1887.

Hon. Commissioner of Patents, Washington, D. C.

DEAR SIR: I amend my specification in the above-noted application by *striking out claims 1, 3, and 4 and by substituting* for claims 1 and 4:

B'. Cancelled per D.

1. In a storage case for books etc., the combination of a vertically adjustable supporting shelf or rack and a roller journaled in, and carried by said shelf or rack and projecting slightly above and in front of its front edge substantially as and for the purposes set forth.

[B².]* Cancelled per D.

3. In a storage case for books, etc., the combination of a vertically adjustable rack composed of metallic strips and having a recess or re-entrant bend in its front edge, and a roller set in said recess or bend and carried by said rack so as to project slightly above and in front of its front edge, substantially as and for the purposes set forth.

and by renumbering the remaining claims.

HORACE J. HOFFMAN,
By E. H. BOTTUM,
His Attorney.

Milwaukee, Wis., Oct. 9, 1888.

[Matter enclosed between rules erased in copy.]
[* Words and figures enclosed in brackets erased in copy.]

PAGES MISNUM

147 We have carefully examined the references cited in the last official action herein in comparison with the claims in question and find that shelves "composed of metallic strips" and provided with rollers are shown in patents to Reed and to Judge *et al*, but we do not discover in any of the references of record "a vertically movable shelf or rack having a roller journaled in and carried by it, so as to project above and in front of its front edge."

The shelf shown in patent to Conant is neither adjustable vertically nor is it provided with a roller journaled therein so as to project above and in front of its front edge. A roller is located, as shown in patent aforesaid, in front of the front edge of the shelf, but it is journaled in the jambs of the case, independently of the shelf, and in case the latter were moved out of its place vertically its front edge would be left exposed by said roller, which must of necessity remain in a fixed position. No provision, however, is made for the vertical adjustment of the shelf. The same comments apply to the device shown in patent to Adams of record.

None of the other patents cited show even the roller *projecting in front of the front edge of the shelf.*

As amended and restricted it is respectfully submitted that the claims herewith presented avoid the references and should be allowed.

Very respectfully,

E. H. BOTTOM,
Att'y for Horace J. Hoffman.

148 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE, *Oct.* 29, 1888.
Mailed " " "

Storage cases for books, &c. Serial No., 227,363. Filed Feb. 12, 1887.

H. J. Hoffman, care Elias H. Bottum, Milwaukee, Wis.:

As the references show that rollers have been used in connection with fixed shelves and located in such a manner as to project upward and forward beyond the shelf, it does not involve invention to pivot rollers in such a relation in an adjustable shelf, and claims 1 and 3 are for this reason rejected on the patents already in the case.

OSCAR WOODWARD, *Exam.*

Before the United Stated Patent Office.

Room 249.

Application of H. J. Hoffman for letters patent for storage cases for books, etc. Filed Feb'y 12th, '87. Serial number, 227,363.

To the Hon. Commissioner of Patents.

SIR: You are requested to recognize Charles E. Foster and Frank L. Freeman, of the firm of Foster & Freeman, of the city of Wash-

UMBERED

ington, District of Columbia, as our attorneys, with full power
149 of substitution and revocation to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office and before the supreme court D. C. connected with the application or with the patent granted thereupon, and to do all other lawful acts and things which we personally present could.

[CORPORATE SEAL.] FENTON METALLIC MANUFACTURING CO.
ALEXIS CRAM, *Sec'y.*

150 Room 249.

Applicant: H. J. Hoffman. Invention: Storage cases for books. Filed Feb'y 12th, 1887. Serial No., 227,363.

To the Hon. Commissioner of Patents.

SIR: Regarding claims 1 and 3, none of the references show a vertically adjustable metallic shelf *itself* supporting a roller projecting above and in front of the front edge of the shelf.

Reed, No. 359,691, shows a roller C^2 or C^3 set in behind the front edge of the shelf.

Judge & Farrelly, No. 303,291, does not show clearly where the rollers *j* are located with respect to the front edge of the shelf; but from Fig. 1 it appears they are set behind the front of the shelves.

Conant, No. 316,241, the front roller F′ is set in an independent piece and not connected with the shelf.

Adams, No. 338,459, also shows a front roller entirely independent of the shelf.

For which it will be seen that neither of the references cited answer the terms of the claims. While a shelf *vertically adjustable* is a limitation in each of the claims, still they are otherwise limited to a front roller mounted in and carried by the shelf and not independent thereof.

Insert as an additional claim the following:

[6′.]† Per G.

6,* 6 [8].† In a storage case for books, &c., a supporting rack, frame or shelf, supporting a plurality of rollers projecting above its upper surface, and also a roller projecting below the lower surface of the first-named rollers,
151 substantially as described.

Insert E′ 7.

Respectfully, FOSTER & FREEMAN,
Att'ys for Hoffman.

G.

Washington, D. C., Feb'y 14th, 1889.

[Matter enclosed between rules erased in copy.]
[* In pencil in copy.]
[† Words and figures enclosed in brackets erased in copy.]

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE, *Feb.* 26, 1889.
Mailed " " "

Storage cases for books, &c. Filed Feb. 12, 1887. # 227,363.

H. J. Hoffman, c. o. Foster & Freeman, city:

Claims 1 and 3 are finally rejected on the references and for the reasons given in the last official letter.

Claim 8 is exactly the same as claim 2, which now stands allowed, and both these claims cannot be retained.

FRANK C. SKINNER, *Examiner.*

152 Room 249.

Applicant: H. J. Hoffman. Invention: Storage cases for books, &c. Filed Feb'y 12th, 1887. Serial # 227,363.

To the Hon. Commissioner of Patents.

SIR: We amend this case as follows:

Erase claims 1 *and* 3.

Claim 8 is distinguished from claim 2 in that it is not limited to two sets of rollers. The former is slightly broader in its scope, and for this reason we think both claims are legitimately made.

A reconsideration is requested.

Respectfully, FOSTER & FREEMAN,
Att'ys for Hoffman.

G.

Washington, D. C., March 18th, 1889.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE, *April* 16, 1889.
Mailed, " " "

Storage cases for books, &c. Feb. 12, 1887. 227,363.

249.

H. J. Hoffman, care Foster & Freeman, city:

In view of a probable interference the above case is suspended for ten days. At the expiration of that time it should be called up by applicant for further action.

The delay in this case has been caused by the fact that the interfering case could not be found.

FRANK C. SKINNER, *Examiner.*

153 U. S. Patent Office,
May 3, 1889,
Ex'r of interferences.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *April* 27, 1889.

Interference No. —.

Horace J. Hoffman, care Elias H. Bottum, Milwaukee, Wis.:

Please find below a copy of a communication from the examiner concerning your application for storage cases for books, &c., filed Feb. 12, 1887; serial number, 227,363.

Very respectfully, C. E. MITCHELL,
[JOHN S. SEYMOUR,]*
Commissioner of Patents.

Room No. 249.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 110 must be sealed up and filed on or before the 24 day of May, 1889, with the subject of the invention and name of party filing it indorsed on the envelope. The interference number should also be indorsed thereon. The subject-matter involved in the interference is:

The combination with horizontal brackets, of the parallel rollers journaled at their ends in the said brackets, and the vertical guide-rollers mounted on the brackets, substantially as specified.

154 The subject-matter of the interference is embraced by the case and claims 2, 3, and 4 of applicant and the case and claims 2 and 4 of Joshua Seyster, of Concordia, Kansas, and whose attorneys of record — C. A. Snow & Co., of Washington, D. C.

FRANK C. SKINNER, *Examiner.*

155 Room No. 249.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *July* 15, 1889.

In re Interference
JOSHUA SEYSTER
v.
HORACE J. HOFFMAN. } Before the Primary Examiner, Division 8.

Horace J. Hoffman, care Foster & Freeman, city:

Please find below a communication from the examiner in charge of division 8 in regard to the above-cited case.

Very respectfully, C. E. MITCHELL,
[JOHN S. SEYMOUR,]*
Commissioner of Patents.

[* Words and figures enclosed in brackets erased in copy.]

You are hereby notified that the motion of Seyster to dis-olve the above-entitled interference has been granted for reasons on file. Limit of appeal will expire July 25, 1889.

ROB'T P. HAINS,
Acting Examiner.

156 Room 249.

Applicant: Horace J. Hoffman. Invention: Storage cases for books, &c. Filed February 12, 1887. Serial No., 227,363.

To the Hon. Commissioner of Patents.

SIR: We amend this case by *inserting the following* additional claims:

E.
Sub. F'.

(E.)

7. The combination of a rack, etc.* A* with the parallel horizontal rollers of a book rest, journaled therein and the (of side rollers arranged vertically,)† vertical rollers arranged at the sides thereof,* substantially as described.

(E.)

8. The combination with horizontal racks supporting horizontal parallel rollers, and upright rollers journaled in brackets adjacent to the (ends)† sides* of the racks, substantially as described.

[E'10.]‡
10.*
Per H.

[(F.)]‡ (J. E.)

9. 2. In a book shelf the combination of a supporting frame, a series of horizontal rollers, the front roller in two separated sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections, substantially as described.

10.*

Respectfully,

FOSTER & FREEMAN,
Attorneys for Hoffman.

G.

Washington, D. C., July 25, 1889.

[Matter enclosed between rules erased in copy.]
[* In pencil in copy.]
[† Words enclosed in parentheses erased by pencil in copy.]
[‡ Words and figures enclosed in brackets erased in copy.]

11262

157 Room 249.

Applicant: H. J. Hoffman. Invention: Storage cases for books, etc.
Filed Feb'y 12, 1887. Serial No., 227,363.

To the Hon. Commissioner of Patents.

SIR: We amend this case as follows:
Erase claims 7 and 8 and substitute—

F'.
7.* 7. The combination with a case provided with horizontal rollers and supports therefor, of upright rollers arranged adjacent to the ends of the horizonal rollers, and supports for said upright rollers, substantially as described.

8.* 8. The combination of a shelf or rack, with the parallel horizontal rollers journaled therein, and the vertical rollers arranged at the sides thereof, substantially as described.

Per G.

9.* 9. The combination with horizontal racks, supporting horizontal parallel rollers, of upright rollers journaled in brackets adjacent to the sides of the racks, substantially as described.

Change the original of claim "9" to 10.

Respectfully, FOSTER & FREEMAN,
Att'ys for Hoffman.

Washington, D. C., Oct. 16, 1889.

158 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *October* 16, 1889.
Mailed " " "

Interference No. —.

H. J. Hoffman, care Foster & Freeman, city:

Please find below a copy of a communication from the examiner concerning your application for storage cases for books, &c., filed Feb. 12, 1887; serial number, 227,363.

Very respectfully, C. E. MITCHELL,
JOHN S. SEYMOUR,
Commissioner of Patents.

[Matter enclosed between rules erased in copy.]
[* In pencil in copy.]

Room No. 249.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement — by rule 110 must be sealed up and filed on or before the — day of ——, 189–, with the subject of the invention and name of party filing it indorsed on the envelope. The interference number should also be indorsed thereon. The subject-matter involved in the interference is—

In a book shelf the combination of a supporting frame, a series of horizontal rollers carried thereby, a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller section.

Included in the case and claims 5 and 10 of applicant and in the case and claim 2 of Jewell & Yawman, of Rochester, N. Y., and whose attorney is P. T. Dodge, Washington, D. C.

ROB'T P. HAINS,
Acting Examiner.

159

U. S. Patent Office,
Oct. 25, 1889.
Ex'r of interferences.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Oct.* 18, 1889.

Interference No. —.

Horace J. Hoffman, care Foster & Freeman, city:

Please find below a copy of a communication from the examiner concerning your application for storage cases for books, &c., filed Feb. 12, 1887; serial number, 227,363.

Very respectfully,

C. E. MITCHELL.
JOHN SEYMOUR,
Commissioner of Patents.

Room No. 249.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 110 must be sealed up and filed on or before the 15 day of Nov., 1889, with the subject of the invention and name of party filing it indorsed on the envelope. The interference number should also be indorsed thereon. The subject-matter involved in the interference is—

Q. 349. How long is it since you have seen these two connected in that combination? I do not mean how long since you looked at them, but when did you first see this combination of hand hold and rollers in shelving?

A. Well, three years ago, as manager of the Washington office—of the Office Specialty Manufacturing Company.

Q. 350. How long is it since you have sold or offered for sale the form of roller book shelf No. 4, figure 17?

A. I will not say that I have offered any of those, just as that is made there—not as that is made.

Cross-examination by Mr. FOSTER:

X Q. 351. Your predecessor, as manager in the Washington office, was J. H. Davis, I believe?

A. John H. Davis, yes, sir.

X Q. 352. When did you succeed him?

A. I cannot give you the date exactly. It was the middle of August last year.

X Q. 353. You have had in your office numbers of catalogues like the Exhibit 1889 Catalogue?

A. We have had a number of these, yes, sir.

X Q. 354. What do you mean by a number; how many have you had in your office during the last three years?

A. I can only speak for the last few months myself.

129 X Q. 355. Since you have been there?

A. Since last April I suppose we have had a couple of hundred of them.

CHARLES E. BIRCKHEAD,
By the Examiner by Consent.

Subscribed and sworn to before me, this — day of ——, 1892.

——— ———,
Examiner in Chancery.

The taking of these depositions was thereupon adjourned subject to notice.

130 EXHIBIT M. R. J. No. 2.

STATE OF INDIANA, } ss:
Wayne County, }

Personally appeared before the undersigned, a notary public in and for said county and State, Everett A. Richey, a person of lawful age, who, being duly sworn on his oath, says that he is clerk of the Wayne circuit court and has been acting as such clerk since November, 1885; that he was a deputy clerk in said clerk's office from June, 1877, to November, 1886; that as such deputy and clerk he has had access to and control of the vault of said clerk's office since June, 1877; that the book shelf marked on front edge "Fee Book, No. 2, Com. Pleas" and on the back "Richmond, Ind., shelf from clerk's office," is the identical shelf taken from a cabinet in my office

where it has been in use along with a large number of other shelves of exactly the same kind since August, 1873, to his personal knowledge; that such shelf was removed by and with his consent and under his personal observation, and further saith not.

EVERETT A. RICHEY.

131 Subscribed and sworn to before me this 26th day of April, 1892.

[SEAL.] WILLIAM A. BOND,
Notary Public.

DISTRICT OF COLUMBIA, *ss:*

I, William Herbert Smith, an examiner in chancery in and for the city of Washington, District of Columbia, do hereby certify that the foregoing depositions were taken down by me in shorthand from the oral statements of said witnesses at the time and place mentioned in the caption thereof and were by me transcribed; that said depositions were thereupon read over by said witnesses and were then subscribed by me by consent of counsel. That said witnesses were first duly sworn to testify the truth, the whole truth and nothing but the truth touching the matters in controversy.

I further certify that I am not of counsel in said cause, nor in anywise interested in the result of this suit.

WM. HURBERT SMITH,
Examiner in Chancery.

Fees, $45.00, paid by defendant.

WM. HERBERT SMITH, *Examiner.*

(Here follows drawing marked page 132.)

133 DEFENDANTS' EXHIBIT.

Memorandum.

This is to certify that the annexed is a true copy from the records of this office of the file-wrapper and contents in the matter of the letters patent granted Horace J. Hoffman, assignor, by mesne assignments, to the Fenton Metallic Manufacturing Company, April 7, 1891, number 450,124, for improvement in storage cases for books, etc.

134 *Petition.*

To the Commissioner of Patents:

Your petitioner, Horace J. Hoffman, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, prays that letters patent may be granted to himself for the invention of improvements in storage cases for books, etc., set forth in the annexed specification, vesting in him and his legal representatives the exclusive right of the same upon the terms and conditions expressed in the act of Congress in that case made and provided.

Nos. 726 & 727
Denton Metallic Mfg. Co. steel
Office Specialty Mfg. Co. } page 132

Style No. 3.

The shelf frame is made of band steel, firmly riveted together, and contains three continuous rollers, each the full length of shelf, and made of best refined steel, in tubular form.

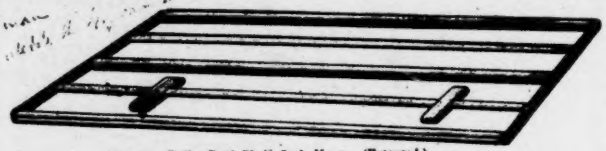


Fig. 16. Roller Book-Shelf, Style No. 3. (Patented.)

Style No. 4.

The shelf frame is made of band steel, firmly riveted together and double braced, making a remarkably strong shelf. The back roller is a continuous one, full length of shelf; the center rollers are divided only by thickness of center brace. The two short rollers in front are divided by a guide support in half oval form, leaving a space for book hold.

All rollers have our improved steel bearings, and each shelf is provided with our patent book protector.

We furnish shelves with all rollers japanned, or front rollers nickle plated, as desired. The shelves are constructed entirely of wrought steel there is no wood or cast iron about them.

Shelves are made of any size to accommodate books or maps.

Cabinets for Roller Book-Shelves.

The upright supports are made of one solid sheet of steel plate, with adjustment holes perforated ½ inch apart, so shelves can be adjusted to suit books of different thicknesses when desired. Each shelf is supported by four strong bolts passing through holes in perforated steel plates.

For description of regular base and cornice, and manner of connecting cabinet to special base containing cupboards or drawers, see page 5.

In front of each steel upright are placed revolving rollers, held in place by brackets two feet apart, attached to uprights; the rollers revolving freely on steel pins, prevent wear at ends of books.

If for any reason it is desired to have books placed in upright position, we furnish upright stalls provided with sets of rollers at bottom (as shown in fig. 12), by means of which books are handled with comparative ease, and any great wear on the end of book is prevented.

Fig. 17. Roller Book-Shelf, Style No. 4. (Patented.)

COMPLAINANT'S EXHIBIT.
Office Specialty Manufacturing Company.

MISSING PAGES
11264

And he further prays that you will recognize Elias H. Bottum, of Milwaukee, Wisconsin, as his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawing, to receive the patent, and to transact all business in the Patent Office connected therewith.

HORACE J. HOFFMAN.

135 *Specification.*

To all whom it may concern:

Be it known, that I Horace J. Hoffman of the city and in the county of Milwaukee and State of Wisconsin, have invented certain new and useful improvements in storage cases for books etc. and I do hereby declare that the following is a full, clear and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked, which form a part of this specification:

The object of my invention is to facilitate the handling and prevent the abrasion and injury of heavy books, etc. It consists essentially of the peculiar arrangement of the guiding and supporting rollers and of the peculiarities in the construction of the case and shelves hereinafter specifically set forth.

In the accompanying drawing like letters designate the same parts in the several figures. Fig. 1 is a perspective view of a cabinet or case embodying my improvements: Fig. 2 is a plan view on an enlarged scale of one of the shelves or book-supporting racks; Fig. 3 is a vertical cross-section of the same on the line *x x*, Fig. 2; Fig. 4 is a sectional detail of one of the upright guide-roll bearings, showing also the method of securing the book shelves or racks in the case, and Fig. 5 is a horizontal section taken on the line *y y*, Fig. 4.

A represents the cabinet or case which is preferably formed of heavy sheet iron, with or without a back as desired. B is one of the book-supporting shelves or racks composed of a
136 metallic frame in which are mounted rollers for guiding and supporting the books, etc. This metallic frame is preferably formed of heavy band iron, in sections c, c^1, c^1, c^2, and c^3, c^3.

The section c forming the back of the rack extends from side to side of the case A and is bent forward at each end at right angles and perforated or notched, as shown in Fig. 4, to receive the bolts a^1 a^1, by which the rack is secured at the rear to said case. The two sections c^1 c^1 are attached to the section c a short distance of the ends thereof, extend from the back to the front of the case and are bent outward at right angles to meet the sides of the case and again back at right angles at their ends, which are perforated or notched, as seen in Fig. 4, to receive the bolts a^1 a^1 supporting the frame at the front and securing the same to the sides of said case. The middle U-shaped section c^2 is attached at its ends to the rear section and extends from the back to the front of the case parallel with

the sections c^1 c^1 and forms the center of the front side of the frame which is bent inwardly at c^4, thus exposing a portion of the book to the grasp and facilitating its removal from the case. Cross-sections c^3 c^3 parallel with and a little to the rear of the front of the roller frame connect and brace the sections c^1 c^1 and c^2.

Rollers n n^1 made of iron, wood, or any suitable material are mounted, as shown in Fig. 2, in pairs parallel with the front and rear edges of the rack B between the sections c^1 c^1 and c^2, which are perforated and furnish[ed]* bearings for the journals of said rollers. One of each pair, of said rollers, preferably the front one n, is set above the other and projects above the roller frame, as seen in Fig. 2, so as to support a book out of contact with said frame.

137 The rear rollers n^1 n^1 of each pair are made to project below the roller frame and thus prevent the book on the rack next below, when tilted in removing or inserting the same in the case, from rubbing against said frame.

By thus arranging one set of rollers below the other each set operates independently and when a book is resting upon the rollers n n, and a book being placed upon or removed from the shelf or rack next below engages any of the rollers n^1 n^1 they will turn freely without effect upon the book resting above on the rollers n n.

If desired, rollers n^2 n^2 may be placed between the side limbs of section c^1 of the roller frame on a level with the rollers n n to prevent the book from sagging at the center. For supporting all ordinary sizes of books, however, the rollers n n, if properly disposed, are sufficient without the rollers n^2 n^2.

The front rollers n n are set as seen in Figs. 2 and 3 in front of the cross-sections c^3 c^3 of the roller frame and project slightly in front of and above said frame, so as to prevent contact between said frame and a book whenever the latter is inserted in, or removed from the case A at any inclination to the racks B.

At the ends of the racks B, just in advance of the sides of case A and projecting a little inside of the same, I provide the upright rollers D D, which are journaled in brackets d d secured to the sides of said case A, as seen in Figs. 4 and 5.

For convenience in moving the case, two short upright rollers D^1 D^1 may be set in advance of the rollers D D in extensions d^1 d^1 of the brackets supporting the adjacent ends of said rollers D D, as shown in Fig. 1.

138 Said rollers D^1 D^1 serve not only as handles for moving the case but also in place of rollers D to prevent the ends of a book placed on the adjacent rack B from rubbing against the side of said case. The brackets d d not only furnish bearings for the upright rollers D D, but serve also to connect and retain in place the upright parts of the case adjacent to and forming the slots a a.

139 Substitute H^1.

[* Words and figures enclosed in brackets erased in copy.]

I claim:

Schedule A'.

1. In a storage cases for books, etc., a supporting shelf or rack provided with a roller, the face of which projects beyond the edge of said shelf or rack, substantially as and for the purposes set forth.

2. In a storage case for books, etc., supporting racks, each composed of a roller frame and rollers mounted therein projecting above and below said frame, substantially as and for the purposes set forth.

3. In a storage case for books, etc., supporting racks, each composed of a frame formed with a re-entrant bend or recess in its front edge and rollers mounted in said frame, substantially as and for the purposes set forth.

4. In a storage case for books, etc., a rack, composed of a frame formed of the back section c, side sections c^1 c^1, middle U-shaped section c^2 having a re-entrant bend in front, and cross-sections c^3 c^3 connecting the sections c^1 c^1 and c^2 and rollers journalled in said frame, substantially as and for the purposes set forth.

5. In a storage case for books, etc., a shelf or rack having one or more recesses in its front edge and a roller or rollers set in said recess or recesses with its working face projecting beyond the front edge of said shelf or rack, substantially as and for the purposes set forth.

6. In a storage case for books, etc., supporting racks or shelves, and upright rollers set at the ends of said racks or shelves a little inside of the sides of said case, substantially as and for the purposes set forth.

140 7. In a storage case for books, etc., supporting racks or shelves and upright rollers mounted in brackets projecting forward from the sides of said case, forming handles for moving the same and arranged to prevent a book or the like on the adjacent shelf from rubbing against the sides of said case, substantially as and for the purposes set forth.

8. In a storage case for books, etc., a portable cabinet or case, shelves or racks vertically adjustable in said case and rollers mounted in

[Matter enclosed between ru'es erased in copy.]

said shelves or racks, substantially as and for the purposes set forth.

9. In a storage case for books, etc., a portable case provided with supporting shelves or racks, rollers set in the front edges of said shelves or racks and projecting beyond the same, and upright rollers projecting a little in front and inside of the sides of said case, substantially as and for the purposes set forth.

Insert E' 7.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

HORACE J. HOFFMAN.

CHAS. L. GOSS.
GEORGE M. GOLL.

141 *Oath.*

STATE OF WISCONSIN, } ss:
County of Milwaukee, }

Horace J. Hoffman, the above-named petitioner, a citizen of the United States and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, being duly sworn, deposes and says that he verily believes himself to be the original, first, and sole inventor of the improvements in storage cases for books, etc., described and claimed in the foregoing specification; that the same have not been patented to himself or to others with his knowledge or consent in any country; that the same have not to his knowledge been in public use or on sale in the United States for more than two years prior to this application, and he does not know and do- not believe that the same were ever known or used prior to his invention thereof.

HORACE J. HOFFMAN.

Sworn to and subscribed before me this 9th day of February, A. D. 1887.

CHAS. L. GOSS,
[NOTARIAL SEAL.] *Notary Public, Milwaukee Co., Wis.*

[Matter enclosed between rules erased in copy.]

142 Copied. R. R.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Feb.* 26, 1887.
Mailed " " "

Storage cases for books, &c. Filed Feb. 12, 1887. No. 227,363.

H. J. Hoffman, care Elias H. Bottum, Milwaukee, Wis.:

Claims 1, 2, 5, and 8 are rejected on patent to Conant, April 21, 1885, No. 316,241, book-cases.

Claims 3 and 4 are rejected on patent to Beidler, Apr. 9, 1872, No. 125,521, book shelves, which shows that it is common to cut away a portion of a shelf to form a space for the insertion of the hand.

Claims 6, 7, and 9 are rejected for the reason that in view of the references no invention is involved in placing rollers wherever it is desirable to prevent friction.

OSCAR WOODWARD.

143 Room 105. M. A. J.

Horace J. Hoffman. "Storage case for books, etc." Filed February 12, 1887. No. 227,363.

Hon. Commissioner of Patents, Washington, D. C.

DEAR SIR: I amend my specification in the application above noted by striking out all the claims and substituting therefor:

A'.

(A.)

1. In a storage case for books, etc., the combination of a vertically adjustable supporting shelf or rack and a roller journaled in said shelf or rack and projecting beyond the front edge thereof, substantially as and for the purposes set forth.

Sub. B'.

[(A).]* (D.)

[2.]* 1. In a storage case for books, etc., a supporting rack composed of a roller frame or shelf and two sets of rollers journaled therein, one set projecting above and one below, the other substantially as and for the purposes set forth.

Cancelled per G.

(A.)

[3.]* In a storage case for books, etc., the combination of a pack composed of metallic strips and supporting rollers journaled in and

[Matter enclosed between rules erased in copy.]
[* Words and figures enclosed in brackets erased in copy.]

projecting above said rack, substantially as and for the purposes set forth.

(A.)

Sub. B². 4. In a storage case for books, etc., the combination of a rack composed of metallic strips and having a recess in its front edge and a roller set in said recess projecting beyond the front edge of and journaled in, said rack, substantially as and for the purposes set forth.

144 the sides of said case for which they serve as a finish or jambs, substantially as and for the purposes set forth.

(D.) [(A.)]*

[4. 6. 5.]* The combination of a portable storage case provided with casters, horizontal[ly]* supporting racks or shelves and upright rollers forming handles for moving said case and arranged to prevent a book or the like on the adjacent shelf or shelves from rubbing against the sides of said case, substantially as and for the purposes set forth.

Am'd't to be entered after *aeeesev* with.†

(□) [(A.)]*

[4. 7. 6.]* In a storage case for books, etc., the combination of a portable cabinet or case, vertically adjustable shelves or racks horizontal roller journaled in said shelves or racks and upright rollers supported in suitable bearings at the ends of said shelves or racks, substantially as and for the purposes set forth.

4.†

(D.) [(A.)]*

Per G. [5. 8. 7.]* In a storage case for books, etc., the combination of a supporting rack or shelf

5.† composed of metallic strips and having a reentrant bend or recess in its front edge and

Per H. rollers journaled in said rack and projecting

5+.† above, and in front of, the same, on each side

Insert C'. of said bend or recess, substantially as and for the purposes set forth.

Dated Milwaukee, Wis.

HORACE J. HOFFMAN,
By E. H. BOTTOM,
His Attorney.

[Matter enclosed between rules erased in copy.]
[* Words and figures enclosed in brackets erased in copy.]
[† In pencil in copy.]

The combination of a rack or shelf, the parallel horizontal rollers journaled therein, and the vertical rollers arranged at the sides thereof.

Included in the case and claims 2, 3, 4, 7, 8, and 9 of applicant; in the case and claim 3 of Edmond H. Babbitt, of St. Louis, Mo., and whose attorney of record is L. Deane, of Washington,
160 D. C., and in the case and claims 2 and 4 of Joshua Seyster, of Concordia, Kansas, and whose attorneys of record are C. A. Snow & Co., of Washington, D. C.

ROB'T P. HAINS,
Acting Examiner.

Room 249.

Applicant: H. J. Hoffman. Invention: Storage cases for books, etc. Filed Feb'y 1st, 1889. Serial No., 227,363.

To the Hon. Commissioner of Patents.

SIR: We have today filed an application as division of this case, in which we have inserted the claims that are not in interference, and we therefore present the following amendment in the above case:

I do not here claim the combination of horizontal and vertical rollers herein described, as the same constitutes the subject of a separate application for letters patent filed April 19th, 1890.

Erase claims 1, 2, 3, 4, 6, 7, 8, 9.

Respectfully, FOSTER & FREEMAN,
Att'ys for Hoffman.

Washington, D. C., April 18, 1890.

161 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE, *Mar.* 18, 1891.
Mailed " 19, 1891.

Storage cases for books, &c. Feb. 12, 1887. 227,363.

250.

M. J. Hoffman, c. o. Foster & Freeman, city:

The interference in which this case was involved having been decided favorably to applicant, the case will be sent to issue as soon as the proper cross-reference is made to applicant's other case and a new drawing can be made, the original drawing having been mutilated during the consideration of the case while in interference.

G. S. ELY, *Ex'r.*

P. E. C.

Memorandum of Fee Paid at U. S. Patent Office.

Amount received, $—. Chief clerk.

(Be careful to give correct serial No.)

Serial No., 227, 363, 1891.

Inventor:
Horace J. Hoffman.

Patent to be issued to—
Fenton Metallic Co.

Name of invention as allowed:
Storage cases for books, &c.

162

Date of payment:
March 14, 1891.

Fee:
$20.00.

Date of filing:
February 12, 1887.

Date of circular of allowance:
March, 1891.

The Commissioner of Patents will please apply the accompanying fees as indicated above.

FOSTER & FREEMAN, *Attorney-*.

Send patent to—
Box issue division.

163

Room 249.

Applicant: Horace J. Hoffman. Invention: Storage cases for books. Filed Feb'y 12, 1887. Serial No., 227,363.

To the Hon. Commissioner of Patents.

SIR: *We amend this* case *by substituting for the words* "I claim" and for the claims the following:

A'. I do not here claim the combination of horizontal and vertical rollers herein set forth as the same constitutes the subject of a separate application upon which letters patent issued October 7th, 1890, No. 437,833.

Without limiting myself to the precise construction of parts shown, I claim:

1. In a storage case for books, etc., the combination of a supporting rack or shelf composed of metallic strips and having a re-entrant bend or recess in its front edge, and rollers journalled in said rack and projecting above and in front of the same on each side of said bend or recess, substantially as described.

2. In a book shelf the combination of a supporting frame, a series of horizontal rollers, the front roller in two separ-ted sections, the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections, substantially as deacribed.

3. In a roller shelf, a frame with a hand hole at the front to permit the hand to pass back of the forward bar, and with the forward supporting rollers at opposite sides of said hand hole, substantially as described.

Respectfully, FOSTER & FREEMAN,
Att'ys for Hoffman.

(C.)

Washington, D. C., March 18, 1891.

164 Room 249.

Applicant: Horace J. Hoffman. Invention: Storage cases for books, &c. Filed February 12, 1887. Serial # 227,363.

Hon. Commissioner of Patents.

SIR: We have to request that the drawing made by the office in place of the one mutilated in the office be substituted for the old drawing, it having been signed by us and duly witnessed.

Respectfully, FOSTER & FREEMAN,
Att'ys for Hoffman.

March 19, 1891, Washington, D. C.

165 Issue division. 227,363.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Mar.* 21, 1891.

Horace J. Hoffman, ass'or, c. o. Foster & Freeman, city.

SIR: Your application for a patent for an improvement in storage case for books, &c., filed Feb. 12th, 1887, has been examined and allowed.

The final fee, twenty dollars, having been received, the letters patent will be forwarded in due order of business.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully, C. E. MITCHELL.
W. E. SIMONDS.
Commissioner of Patents.

166 (Serial number,) —. 1887. (Ex'r's Book) 19/268.

Patent No. 450,124.

Horace J. Hoffman, ass'or by mesne ass'g'ts to the Fenton Metallic Manufacturing Company of New York,

Of Milwaukee,

County of ——,

State of Wisconsin.

Invention: Storage cases for books, &c.

Parts of application filed.

Petition, Feb. 12, 1887.
Affidavit, " " "
Specification, " " "
Drawing, " " "
1 sheet substitute drawing, Mar. 19, 1891.
Model not required.
Specimen not required.
First fee, cash, $15, Feb. 12, 1887.
" " cert., ——.

App. filed complete Feb'y 12, 1887.

Examined March 19, 1891. G. S. Ely.

Countersigned Mar. 21. '91. J. W. Babson, for Commissioner.

Notice of allowance, Mar. 21st, 1891.

Final fee, cash, $20, March 14, 1891.
" " cert., ——, 188–.

Patented April 7, 1891.

Att'y or P. O. address, Elias H. Bottum, Milwaukee, Wis.

Foster & Freeman, city, att'y- for ass'ee.

167 1887.

Contents.

½. Application, 1 papers. Corp.
1. Rej., Feb. 26, '87.
2. Amendment "A," Nov. 22, '87.
3. Rejection, Jan. 13, 1886.
4. Am'd't B, Oct. 11, 188–.
5. Rejection, Oct. 29, 1888.
6. Feb'y 1st, '89, power of att'y.
7. Am'd't C, Feb. 18, 1889.
8. Rej. (final), Feb. 26, 1889.
9. Am'd't D, Mar. 19, '89.
10. Letter, Apr. 16, 1889.
11. Letter of interf., Apr. 29, 1889.
12. Motion to dissolve, July 15, 1889.
13. Am'd't E, July 26, 1889.
14. Amend. F, Oct. 16, 1889.
15. Letter of interf., Oct. 16, 1889.
16. Letter of interf., Oct. 18, 1889.
17. Interf. 13973, favorable, Dec. 7, 1889.
18. Am'd't G, Mar. 18, 1891.

(No Model.)

H. J. HOFFMAN.

STORAGE CASE FOR BOOKS, &c.

No. 450,124. Patented Apr. 7, 1891.

Nos. 726 & 727.

Fenton Metallic Mfg. Co. et al. } $.168
The Office Specialty Mfg. Co. et al. }

Fig. 1.

Fig. 2.

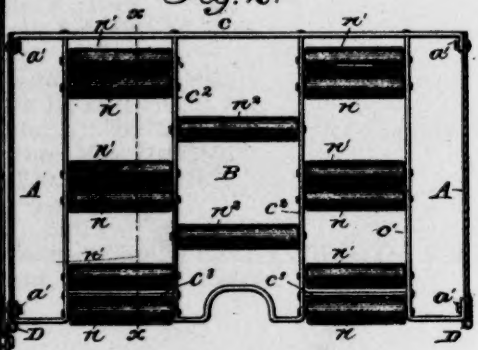


Fig. 3.

Fig. 4.

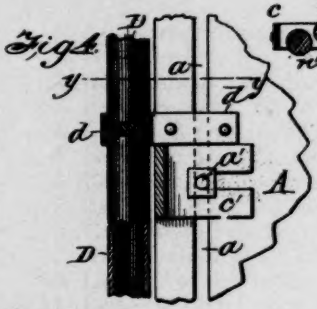
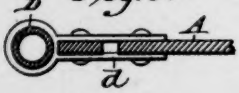


Fig. 5.



Witnesses.
H. M. Read
Percy E. Clarke

Inventor.
Horace J. Hoffman
By Foster & Freeman
Attys.

19. Letter, Mar. 18, '91.
20. Amend't H, Mar. 18, 1891.
21. Letter to office, Mar. 19, 1891.
Title: Improvement in storage cases for books, &c.
45. Furniture book-case roller shelves.

(Here follows drawing marked page 168.)

HORACE J. HOFFMAN, of Milwaukee, Wisconsin, assignor, by mesne assignments, to the Fenton Metallic Manufacturing Company of New York.

Storage-case for Books, &c.

Specification forming part of Letters Patent No. 450,124, dated April 7, 1891. Application filed February 12, 1887. Serial No. 227,363. (No model.)

To all whom it may concern:

Be it known that I, Horace J. Hoffman, of the city and county of Milwaukee, and State of Wisconsin, have invented certain new and useful improvements in storage cases for books, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to facilitate the handling and prevent the abrasion and injury of heavy books, &c. It consists, essentially, of the peculiar arrangement of the guiding and supporting rollers and of the peculiarities in the construction of the case and shelves hereinafter specifically set forth.

In the accompanying drawings like letters designate the same parts in the several figures.

Figure 1 is a perspective view of a cabinet or case embodying my improvements. Fig. 2 is a plan view, on an enlarged scale, of one of the shelves or book-supporting racks. Fig. 3 is a vertical cross-section of the same on the line $x\ x$, Fig. 2. Fig. 4 is a sectional detail of one of the upright guide-roll bearings, showing also the method of securing the book shelves or racks in the case; and Fig. 5 is a horizontal section taken on the line $y\ y$, Fig. 4.

A represents the cabinet or case, which is preferably formed of heavy sheet-iron, with or without a back, as desired.

B is one of the book-supporting shelves or racks composed of a metallic frame, in which are mounted rollers for guiding and supporting the books, &c. This metallic frame is preferably formed of heavy band iron in sections $c\ c'\ c'\ c^2$ and $c^3\ c^3$.

The section c, forming the back of the rack, extends from side to side of the case A, and is bent forward at each end at right angles,

and perforated or notched, as shown in Fig. 4, to receive the bolts a' a', by which the rack is secured at the rear to said case. The two sections c' c' are attached to the section c a short distance inside of the ends thereof, extend from the back to the front of the case, and are bent outward at right angles to meet the sides of the case, and again back at right angles at their ends, which are perforated or notched, as seen in Fig. 4, to receive the bolts a' a', supporting the frame at the front and securing the same to the sides of said case. The middle U-shaped section c^2 is attached at its ends to the rear section c and extends from the back to the front of the case parallel with the sections c' c' and forms the center of the front side of the frame, which is bent inwardly at c^4, thus exposing a portion of the book to the grasp and facilitating its removal from the case. Cross-sections c^3 c^3, parallel with and a little to the rear of the front of the roller-frame, connect and brace the sections c' c' and c^2.

Rollers n n', made of iron, wood, or any suitable material, are mounted, as shown in Fig. 2, in pairs parallel with the front and rear edges of the rack B between the sections c' c' and c^2, which are perforated and furnish bearings for the journals of said rollers. One of each pair of said rollers, preferably the front one n, is set above the other and projects above the roller-frame, as seen in Fig. 2, so as to support a book out of contact with said frame. The rear rollers n' n' of each pair are made to project below the roller-frame, and thus prevent the book on the rack next below, when tilted in removing or inserting the same in the case, from rubbing against said frame. By thus arranging one set of rollers below the other each set operates independently, and when a book is resting upon the rollers n n and a book being placed upon or removed from the shelf or rack next below engages any of the rollers n' n' they will turn freely without effect upon the book resting above on the rollers n n.

If desired, rollers n^2 n^2 may be placed between the side limbs of section c^2 of the roller-frame on a level with the rollers n n to prevent the book from sagging at the center. For supporting all ordinary sizes of books, however, the rollers n n, if properly disposed, are sufficient without the rollers n^2 n^2.

The front rollers n n are set as seen in Figs. 2 and 3 in front of the cross-sections c^3 c^3 of the roller frame, and project slightly
170 in front of and above said frame, so as to prevent contact between said frame and a book whenever the latter is inserted in or removed from the case A at any inclination to the racks B.

At the ends of the racks B, just in advance of the sides of case A and projecting a little inside of the same, I provide the upright rollers D D, which are journaled in brackets d d, secured to the sides of said case A, as seen in Figs. 4 and 5.

For convenience in moving the case two short upright rollers D′ D′ may be set in advance of the rollers D D in extensions d' d' of the brackets supporting the adjacent ends of said rollers D D, as shown in Fig. 1. Said rollers D′ D′ serve not only as handles for moving the case, but also in place of rollers D to prevent the ends of a book placed on the adjacent rack B from rubbing against the side of said case. The brackets d d not only furnish bearings for

the upright rollers D D, but serve also to connect and retain in place the upright parts of the case adjacent to and forming the slots *a a*.

I do not here claim the combination of horizontal and vertical rollers herein set forth, as the same constitutes the subject of a separate application upon which letters patent were issued October 7, 1890, No. 437,833.

Without limiting myself to the precise construction of parts shown, I claim—

1. In a storage-case for books, &c., the combination of a supporting rack or shelf composed of metallic strips and having a re-entrant bend or recess in its front edge and rollers journaled in said rack and projecting above and in front of the same on each side of said bend or recess, substantially as described.

2. In a book-shelf, the combination of a supporting-frame, a series of horizontal rollers, the front roller in two separated sections, the intermediate part of the frame being carried back to permit the admission of the hand between said roller-sections, substantially as described.

3. In a roller-shelf, a frame with a hand-hole at the front to permit the hand to pass back of the forward bar and with the forward supporting-rollers at opposite sides of said hand-hole, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HORACE J. HOFFMAN.

Witnesses:
CHAS. L. GOSS.
GEORGE M. GOLL.

171 COMPLAINANT'S EXHIBIT "C."

Filed March 18, 1892.

Memorandum.

This is to certify that the annexed is a true copy from the records of this office of the decision of the examiner of interferences, August 16, 1890, in the matter of the interference number 13973, Jewell and Yawman *vs.* Hoffman; subject-matter, book shelves.

172 United States Patent Office.

JEWELL & YAWMAN
v.
HOFFMAN.
} Book shelves.

Application of Jewell & Yawman filed Nov. 6, 1888, No. 290,122.

Application of Horace J. Hoffman filed Feb'y 12, 1887, No. 227,363.

Mr. P. T. Dodge, attorney for Jewell & Yawman.
Messrs. Foster & Freeman, attorneys for Hoffman.

The issue in this controversy is defined as follows:

In a book shelf, the combination of a supporting frame, a series

of horizontal rollers carried thereby, a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections.

This case came on to be heard on July 31, 1890. Neither party appeared in person, but each filed a brief.

The testimony on the part of Jewell & Yawman discloses that some time in the summer of 1886 they conceived the invention in issue, and in December, 1886, caused to have made a book shelf, which is offered in evidence as "Exhibit Jewell & Yawman 1886 Shelf." After the construction of this shelf another was made, which is in evidence as "Exhibit Jewell & Yawman Second Roller Shelf," and still another, which is offered as "Exhibit Shelf No. 4 Pattern. This latter shelf is shown to have been made in December, 1887, and since that time to have been manufactured and sold to a considerable extent.

Hoffman's evidence discloses that he conceived the invention in issue in January, 1887, and made a shelf in the following spring similar to the one offered as "Hoffman's Exhibit 1887
173 Shelf." Two other shelves are presented in evidence by him as "Hoffman's Exhibit Straight-bar Shelf" and "Hoffman's Exhibit 1887 Shelf No. 2." Shelves similar to these latter exhibits seem to have been first made by him in the fall of 1887.

Every exhibit of either party is a full-sized, complete shelf, and if the Exhibit "Jewell & Yawman 1886 Shelf" be a full embodiment of the issue it is obvious that Jewell & Yawman are the prior inventors. In the brief filed by counsel for Jewell & Yawman this is strenuously urged. He calls attention to the fact that the "issue does not specify the form or manner in which the frame shall "*be carried back.*" He insists that the issue is intended to be and is generic to any frame having the combination specified, with a hand opening or space between the two exposed front rollers, and is not limited to a frame with a continuous front bar or to one having a bent front bar or to a re-entrant bend in a roller-sustaining bar, and that the exhibit fully meets the language of the issue and presents a structure giving every advantage attending the other forms of shelf in evidence.

It will be observed from an inspection of the 1886 shelf exhibit that the front bar of the frame is *straight*, with short rollers projecting from its front side at or near each end. Such a construction, of course, leaves a space between the rollers in front of the bar, which will permit the admission of the hand when withdrawing a book from a shelf. It is, however, submitted that no part of the frame is *carried back* to effect this purpose. It is true that the whole frame is *back* of these two roller sections, and in that sense the intermediate part is "*carried back*" of them, inasmuch as it is carried by the remaining portion of the frame of which it forms a part.

174 The construction of the issue insisted upon by counsel is believed to be without warrant. A careful reading thereof, it is thought, does not justify it, nor is the examiner of the opinion

that the primary examiner, in view of the state of the art as cited by him while considering the applications here involved, proposed to frame an issue that would be comprehended in a shelf that had a frame with a straight bar, having a roller in front, in two separate sections with a space between them. In the Hoffman application he cites the patent to Adams, No. 338,457, March 23, 1886, and certainly he would not declare an interference upon an issue which, if construed as the counsel insists, would be squarely anticipated by it.

Jewell & Yawman are therefore believed to be entitled to no earlier conception of the issue in controversy than the date upon which they made their Exhibit "Second Roller Shelf." This, as well as their "No. 4 pattern exhibit," fully embody the issue, and each of them is a full reduction to practice of it.

As to their second roller-shelf exhibit, the evidence as to its date of construction *its* meagre and unsatisfactory. Jewell does not know when it was made, save that he is sure it was made after the straight-bar exhibit and before the No. 4 pattern exhibit, which the proof shows was made in December, 1887. Yawman gives no earlier or closer date for its construction than the beginning of 1887. He states that it was made by Gaiser, a workman in the employ of his firm and a witness in this case. Gaiser is not called upon to state anything in regard to it.

175 A year has a beginning and an ending. There must also be an *interim*—a *middle portion*—between such beginning and ending. Dividing a year into these three parts, Jewell & Yawman are not entitled to an earlier date than the last day of the "beginning," and this would be April 30, 1887.

The testimony presented by Hoffman shows that he had a conception of and made a shelf similar to his "Exhibit 1887 Shelf" within a month or two of his application date, and the witness Hine, who, it seems, was an agent engaged in selling the class of goods which both of the parties here contesting were manufacturing, states that he saw a device similar to it in February or March of the year 1887, and that several hundred of them were sold between March and July of such year. It is obvious, and the fact is admitted by counsel for Jewell & Yawman, that the exhibit contains and embodies the issue.

Certainly, Hoffman is entitled to a date as early as his application date. Such date being earlier than any to which, in the opinion of the examiner, Jewell & Yawman are entitled, it follows that he, Hoffman, is entitled to priority of invention, and judgment accordingly is hereby awarded to him.

Limit of appeal will expire Sept. 24, 1890.

WALTER JOHNSON,
Examiner of Interferences.

W. W. ORRICK,
Ass't Examiner.

August 16, 1890.

176 COMPLAINANT'S EXHIBIT D.

Filed March 18, 1892.

Memorandum.

This is to certify that the annexed is a true copy from the records of this office of the decision of the examiners-in-chief on appeal, December 4, 1890, in the matter of the interference Jewell and Yawman *vs.* Hoffman; subject-matter, book shelves.

177 No. 13871.

U. S. PATENT OFFICE, *Dec.* 4, 1890.

Before the examiners-in-chief on appeal.

In the matter of the interference between the application of Major R. Jewell and Phillip H. Yawman, filed November 6, 1888, and the application of Horace J. Hoffman, filed February 12, 1887.

Improvement in book shelves.

Mr. P. T. Dodge for Jewell & Yawman.
Messrs. Foster & Freeman for Hoffman.

The issue in controversy is:

"In a book shelf, the combination of a supporting frame, a series of horizontal rollers carried thereby, a front roller formed in two separate sections, the *intermediate* part of the *frame being carried back* to permit the admission of the hand between the roller sections."

From the state of the art as shown in the record and evidence it is evident that only extremely limited and specific claims could be maintained by either party, and such was the view taken by the primary examiner.

The issue must therefore be strictly construed to embrace literally every specific feature as set forth by the parties in the combination claimed by each.

The 2nd claim of Jewell & Yawman and the 5th and 10th of Hoffman are held by the examiner declaring the interference to embrace the matter in issue and are as follows:

Jewell & Yawman's 2nd claim:

"In a portable roller book shelf, the combination of a rigid portable supporting frame, a series of rollers therein, the front roller divided centrally into two coincident sections and supported by a *retreating bar* or support *e*, whereby the admission of the *hand between* the *roller* sections is *permitted* to grasp the book."

Hoffman's 5th and 10th claims:

"5. In a storage case for books, etc. the combination of a supporting rack or shelf composed of metallic strips and having a re-*entrant bend* or recess *in its front edge*, and rollers journaled in said rack

and projecting above, and in front of the same, on each side
178 of said band or recess, substantially as and for the purposes set forth.

"10. In a book shelf the combination of a supporting frame a series of horizontal rollers, the front roller in two separate sections, the intermediate part of the frame being *carried back* to permit the *admission* of the *hand between* the roller sections, substantially as described."

We must consider the "retreating bar or support *e*" an essential feature, and it is so considered by the examiner in allowing the claim thus specific and limited to stand and go into interference with the Hoffman claims resting on the "carrying back" of the front part of the frame between the rollers, both being for precisely the same purpose and substantially of the same construction.

Now, Hoffman had been in the office about a year and nine months before Jewell & Yawman filed, and it is incumbent on them to overcome the strong presumption in his favor by clear and satisfactory testimony.

To do this they introduce Exhibit Jewell & Yawman 1886 and rest their case on that evidence.

It is very singular that Exhibit "Jewell & Yawman 2d Roller Shelf," which clearly shows the matter in controversy and which Yawman said was made in the beginning of 1887 by one Gaisser, should have been dropped right there, and though Gaisser was afterwards on the stand not a question was put to him concerning it.

But the whole case was made to rest upon the earlier exhibit, both in the proofs and in the brief and argument.

Now, the 1886 exhibit was a mere experimental affair, gotten up to be submitted to the manufacturers of such devices for their adoption. It never was adopted or even favorably considered, but stood neglected and apparently forgotten until discovered and knocked out of the dust by the attorney of Jewell & Yawman in his hunt for testimony to be used in this case.

179 It lacks the series of horizontal rollers as set forth and shown and claimed by both parties and embraced in the issue and has no "intermediate part of the frame *carried back* to permit of the admission of the hand between the roller sections."

But instead thereof there are but three short rollers, one in the extreme rear and two in front, journaled in brackets attached to flat bars which constitute the frame, there being a wide space between the inner ends of the front rollers, which are in close contiguity to the front flat bar of the frame, which is *straight* and forms the "intermediate part between the front rollers" and is *not* "carried back" or curved and has no "re-entrant bend or recess in its front edge to permit the admission of the hand between the roller sections."

Although there is some force in the argument of the attorney of Jewell & Yawman that this old device designed for a roller book shelf had in embryo the idea of furnishing a hand space and was

followed up by a final perfection and reduction to form and practice of the specific article shown and claimed by them, yet we cannot see it in that light, since neither Jewell or Yawman pretend that they had any such idea of a hand space in their heads, and Yawman says when asked by his own attorney, "Why did you make this 'Exhibit 1886 Shelf' at your expense for the Schlicht & Field Co.?"

"A. We expected to *cheapen* the *article* and get it down at as low a price as possible." (Q. and Ans. 18.)

And Erbe, a partner of Yawman, says in answer to Q. 9:

"Q. 9. Was there at that time any advantage recognized in having a space or opening *at* the *front* between the short rollers; if so, what was it?

180 "A. There was *no advantage recognized* in having the rollers set apart that I know of except to produce a *cheaper* shelf."

Schlicht, one of the firm for whom it was made and the party in interest here, says it was "*easier* to manufacture, but he could see no great practical advantage," and that he talked with Jewell and Erbe and Yawman about a shelf with an opening between the rollers, and that he himself devised the idea of "cutting away the shelf at the center to permit the hand to be introduced further back" (X Q. and Ans. 146), and that he suggested the cutting away the shelf (or bar) to leave a hand hole between the rollers. (X Q. and Ans. 162, '3.)

But even if the germ of the invention as finally perfected could be found in the 1886 experimental device, yet Jewell & Yawman did not resume their labors to work it out until after Hoffman had conceived of the same thing and with due diligence had perfected and reduced it to practice and applied for his patent.

Here was a long delay of about two years with nothing done, while the experimental device was laid on the shelf and apparently forgotten and abandoned.

Certainly such an exhibition and proceeding could not secure to Jewell & Yawman, or rather their assignees, the monopoly of the idea of providing a hand hole by cutting back the front bar of the frame and bar all others from that field of invention.

Should they seek to patent the precise thing they then invented and put in form, the case would be different, and we see nothing in the way of their doing so and nothing to lead us to believe that if a patent had been in existence covering that specific device

181 that the examiner would have considered it as anticipatory of the invention in contest.

We must affirm the decision of the examiner of interferences and find priority in Hoffman.

R. L. B. CLARKE,
H. H. BATES,
S. W. STOCKING,
Examiners-in-chief.

182 COMPLAINANT'S EXHIBIT "E."

Filed March 18, 1892.

Memorandum.

This is to certify that the annexed is a true copy from the records of this office of the decision of the Commissioner, March 6, 1891, on appeal in the matter of the interference number 13973, Jewell and Yawman *vs.* Hoffman; subject-matter, book shelves.

183 13973.

U. S. Patent Office.

JEWELL AND YAWMAN
v.
HOFFMAN. } Book Shelves.

Appeal from examiners-in-chief.

Application of Major R. Jewell and Philip H. Yawman filed November 6, 1888, No. 290,122.

Application of Horace J. Hoffman filed February 12, 1887, No. 227,363.

Mr. P. T. Dodge for Jewell and Yawman.
Messrs. Foster & Freeman for Hoffman.

The issue in controversy is as follows:

"In a book shelf the combination of a supporting frame, a series of horizontal rollers carried thereby, a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections."

The examiner of interferences decided in favor of Hoffman. The examiners-in-chief affirmed the decision of the examiner of interferences.

A book shelf, in order to contain the combination embraced in the issue, must have the following features: (1) A supporting frame, (2) a series of horizontal rollers carried thereby, and (3) a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit admission of the hand between the roller sections. These elements are contained in the interfering claims of both parties, and in view of the prior art, as developed in the evidence, the issue must be limited so as to require all of the specific elements mentioned.

Hoffman reduced the invention to practice some time in
184 the spring of 1887 by the making of a "practical case" with a shelf embodying the issue in controversy, and the evidence shows that such book shelves were put upon the market in March of the same year.

The ability of Jewell and Yawman to antedate the case thus made by Hoffman depends upon the question whether the Exhibit

Jewell & Yawman 1886 Shelf embodies the issue in controversy. It is not denied that this case was made in December, 1886, so that if it contains the subject-matter of the issue in a form that had passed the experimental stage priority must be awarded to Jewell and Yawman. I agree with the examiners-in-chief that Exhibit Jewell and Yawman 1886 Shelf does not have the intermediate part of the frame carried back to permit the admission of the hand between the roller sections; neither does it have the "front roller" divided centrally into two coincident sections and supported by a retreating bar or support, *e''*, as set forth in the Jewell and Yawman claim involved in the interference. Even if the exhibit referred — can be said to have contained in a crude and imperfect and undeveloped form the invention of this controversy there is much reason to hold that it was and was treated as an experimental device, and that it was not followed up with the requisite diligence to lay a basis for a judgment of priority as against the earlier reduction to practice in a useful form on the part of Hoffman.

The decision of the examiners-in-chief in favor of Hoffman is affirmed.

C. E. MITCHELL,
Commissioner.

March 6, 1891.

185 COMPLAINANT'S EXHIBIT JEWELL & YAWMAN FILE-WRAPPER AND CONTENTS AND DRAWING OF PATENT 557,392, DATED MARCH 31, 1896.

Filed —, ——.

Memorandum.

This is to certify that the annexed is a true copy from the records of this office of the file-wrapper and contents in the matter of the letters patent granted Major Romeyn Jewell and Philip H. Yawman, assignors to the Office Specialty Manufacturing Company, March 31, 1896, number 557,392, for improvement in roller book shelves.

186 *Petition.*

Amount received, $15. Chief clerk.

To the Commissioner of Patents:

Your petitioners, citizens of the United States, residing at Rochester, New York, pray that letters patent may be granted to them for the improvement in roller book shelf set forth in the annexed specification.

And they hereby appoint Philip T. Dodge, of Washington, D. C., their attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and generally to transact all business in the Patent Office connected therewith.

MAJOR ROMEYN JEWELL.
PHILIP H. YAWMAN.

187 *Specification.*

Specification describing certain improvements in roller book shelf invented by Major R. Jewell and Philip H. Yawman, of Rochester, in the county of Monroe and State of New York.

The aim of our invention is to provide, as a new article of manufacture, complete in itself, a portable roller book shelf, that is, a book shelf which may be handled and adjusted as an entirety, and which shall possess strength and be adapted to permit the ready application and removal of heavy books.

To this end we construct our shelf with a strong self-sustaining metal frame, having therein one or more horizontal real rolls, and also having at the front a strong cross-bar extending continuously from one end to the other with two short exposed rolls arranged wholly in front of said bar end to end, with a space between them to permit the introduction of the hand. We are aware that a single long roll has been arranged in front of a stationary shelf, and also that long rolls have been variously mounted in book-cases; also that two short rolls have been sustained at one end only by spring arms in front of a book-case, and to such constructions we lay no claim.

We believe ourselves to be the first to construct a book shelf which comprises a complete rigid portable frame, with one or more rear rolls therein, and with the two short rolls exposed wholly in fro. t of the frame so that the books may be passe inward and outward over these front rolls without possibility of coming in contact with or being chafed upon the frame, and with a space between the front rolls so that the hand may be passes between them
188 in order to obtain a wide or firm grasp upon the book.

Our improvement may be embodied in various forms, differing slightly from each other, but all including essentially the same features of construction.

In the accompanying drawings,—

Figs. 1 and 2 are perspective views of our shelf in slightly different forms.

[Matter enclosed between rules erased in copy.]

Figs. 3 and 4 are top views of the shelf in slightly modified shapes.

In Fig. 1, A represents a rigid metal frame consisting of two straight parallel longitudinal bars, *a* and *a'*, connected by two cross-bars, *b* and *b'*, riveted or otherwise fixed rigidly thereto.

The bars *b* and *b'*, are projected forward of the front bar *a'*, and curled or fashioned into eyes or bearings which sustain journals at the inner ends of the two short rolls C and C'. These rolls, lie it will be observed, in line with each other wholly in front of the frame bar *a'*, with their approximate ends separated a suitable distance to admit of the hand being passed between them in front of the bar *a'*, to grasp the book. The outer ends of the rolls C C', have their journals sustained in plates *c*, which are riveted to and projected forward beyond the front bar *a''*.

D represents a third horizontal roll, located in the rear part of the frame, having journals at its ends, sustained by bearing plates *d* and *d'* riveted to bar *a*.

The parts above described constitute a complete portable roller shelf which may be secured in a case, cabinet or other support of any suitable character, and which is adapted to sustain a book laid upon its side thereon.

189

In applying the book it is laid upon the forward rolls C and C', and passed rearward thereover, its rear edge being received and sustained upon the roll D.

It is to be observed that the front rolls C and C' are located wholly in front of the frame proper, that is to say, that they are exposed in front of the frame bar *a'*, without anything in front of them so that when the book is placed although it may be in an inclined position, upon them A it is impossible for it to encounter any stationary part of the frame so as to be chafed or cut thereby.

It is to be observed that our shelf being a complete and rigid structure may be adjustable vertically or otherwise within the case or cabinet without changing the relation of its parts or disturbing the adjustment of the rolls.

[Matter enclosed between rules erased in copy.]

Fig. 2 represents a shelf substantially identical with that in Fig. 1. This shelf contains like the first, two longitudinal bars a and a', rigidly connected by cross-bars b and b'. The rear roll D is sustained in precisely the same manner as in the first example. The front rolls are located as in the first instance, forward of the front bar, a', and sustained at their outer ends by plates C C', attached to the front bar. Their inner ends instead of being sustained by the forward ends of the cross-bars b' b, are sustained by independent bearing plates c', fixed to the front bar a''.

This shelf, it will be observed, presents like the first a rigid frame and exposed front rolls with a hand space between them together with a rigid continuous front bar.

In Fig. 3 the front bar a' of the frame is continuous from end to end and has its two extremities turned rearward in parallel lines. These two ends are connected by the two rigid longitudinal bars a a^2. Within the
190 frame thus constructed are mounted the two longitudinal rollers E and E', extending the entire length of the frame and journalled therein. Forward of the front bar a', are located the two short rolls C and C', in line with each other with a hand space between them. Each roll is sustained by a U-shaped plate c^4, riveted to the front bar and having its ends turned forward to receive the ends of the roll. In this case the front bar serves as in the other examples to sustain both of the front rolls which have between them forward of the bar the space for the admission of the hand.

In Fig. 4 the frame consists, as before, of a straight rigid front bar a', and a rear bar a, parallel therewith, the two connected to end bars a^6, which are projected forward beyond the front bar to sustain the outer ends of the two short rolls.

These rolls, which are arranged in line, and exposed at the front with a space between them for the admission of the hand, are sustained at the inner ends by the plates or bars a^6 riveted to the front bar.

[Matter enclosed between rules erased in copy.]

The rear part of the frame contains two longitudinal rolls E E'.

191 Having thus described our invention, what we claim is,—

1. As a new article of manufacture, a portable book shelf consisting of a flat rigid frame containing one or more rear rollers, and having at the front a straight continuous bar from end to end, and two short rolls located forward of said bar, with a space between their inner ends for the admission of the hand in grasping the book.

As a new article of manufacture, a portable book shelf comprising

Per A. 2. [In a book shelf,]* A a flat rigid frame, having at the front a straight bar from end to end in combination with two short rolls located in front of said bar with an open space between their ends to admit the hand in grasping the book.

As a new article of manufacture a portable book shelf comprising

3. A [In a book shelf, the combination of]* a flat rigid frame having a continuous bar across the front from end to end, two short rollers arranged forward of said bar with a space between their ends for the admission of the hand, and supports for said rolls attached to and sustained by the front bar.

f

In testimony whereof I hereunto set my hand this first day o October, 1890, in the presence of two attesting witnesses.

MAJOR ROMEYN JEWELL.
PHILIP H. YAWMAN.

ALBRECHT BUEDINGEN.
LIBBIE A. WEBER.

192 *Oath.*

STATE OF NEW YORK, }
City of Monroe. }

Major R. Jewell and Philip H. Yawman, the above-named petitioners, being duly sworn, depose and say that they verily believe themselves to be the original, joint, and first inventors of the improvement in roller book shelf described and claimed in the accompanying specification; that they do not know or believe that the same was ever before known or used; that the same has not been patented to them or to others with their knowledge or consent in

[Matter enclosed between rules erased in copy.]
[* Words and figures enclosed in brackets erased in copy.]

any country; that the same has not to their knowledge been in public use or on sale in the United States for more than two years prior to this application, and that they are citizens of the United States and residents of Rochester, New York.

MAJOR ROMEYN JEWELL.
PHILIP H. YAWMAN.

Sworn to and subscribed before me this 1st day of October, 1890.
[NOTARIAL SEAL.] FREDERICK P. ALLEN.

193 United States Patent Office.

Jewell & Yawman. Roller book shelf. December 7, 1891. Application for patent.

Hon. Commissioner of Patents.

SIR: Respecting the annexed application careful and special attention is requested.

The construction intended to be covered by this application and generally illustrated in Figs. 1 and 2 has been declared officially by the examiner of interferences, the board of examiners-in-chief, and the Commissioner in person to be outside of the issue in the recent interference of Hoffman *v.* Jewell & Yawman. These constructions in full size were in evidence in that case, and it was officially determined that they were constructed prior to the Hoffman invention, but that they were outside of the Hoffman invention and the issue in interference. The record speaks for itself in this regard.

Attention is called to this fact at this time in order that the examiner may understand that there is no conflict between the present application and the Hoffman patent, No. 450,134.

Respectfully, etc., P. T. DODGE,
Att'y for Jewell and Yawman.

194 Application for patent. Jewell & Yawman. Roller book shelf. December 7, 1891. No. 414,104.

Hon. Commissioner of Patents.

SIR: I present herewith a supplemental oath in view of the fact that the original oath was executed more than six months ago.

Respectfully, &c., P. T. DODGE,
Att'y for Jewell and Yawman.

December 12th, 1891.

United States Patent Office.

Jewell & Yawman. Roller book shelf. December 7, 1891. Application for patent.

STATE OF NEW YORK, } ss:
County of Monroe, }

Major R. Jewell and Philip H. Yawman, being severally sworn, depose and say that they are the identical persons who filed an ap-

plication in the United States Patent Office for improvement
195 in roller book shelves on the 7th day of December, 1891, said application being executed October 1, 1890; that they believe themselves to be the original, joint, and first inventors of the matters and things therein described and claimed; that they do not know or believe that the same was ever before known or used; that the same has not been patented in any country with their knowledge or consent, and that the invention has not been in public use or on sale in the United States for more than two years.

MAJOR ROMEYN JEWELL.
PHILIP H. YAWMAN.

Sworn to and subscribed before me, at Rochester, this 11th day of December, A. D. 1891.

FREDERIC P. ALLEN,
[NOTARIAL SEAL.] *Notary Public.*

196 Room No. 250.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Any communication respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *January* 23, 1892.
Mailed " " "

Subject: Roller book shelf. Filed Dec. 5, 1891. No. 414,104.

Major R. Jewell & P. H. Yawman, care Philip T. Dodge, Esq., Washington, D. C.:

Please find below a communication from the examiner in charge of [your]* application above noted.

W. E. SIMONDS,
[JOHN S. SEYMOUR,]*
Commissioner of Patents.

Reference letters C C′ are used for the rolls in figures 1 and 3 and for the supporting plates in figure 2. This should be corrected on the drawing and in the specification.

The claims are rejected on each of the patents to Babbitt, No. 420,898, February 4, 1890, and Hine, No. 458,902, September 1, 1891 (book-cases, roller shelves), and also on patent to Harris, No. 107,042, September 6, 1870 (book-cases, roller shelves), in connection with patent to Adams, No. 338,459, March 23. 1886 (same class).

Roller shelves having at the front a straight bar from end to
197 end being old and common, there is thought to be no invention in attaching to said front bar the pair of rollers shown by Adams.

G. S. ELY, *Ex'r.*

P. E. C.

[*Words and figures enclosed in brackets erased in copy.]

198 Jewell & Yawman. Roller book shelves. December 5, 1891. #414,104. Application for patent.

Hon. Commissioner of Patents.

SIR: I present herewith an amendment to claims 2 and 3, in view of which and the following remarks it is thought the case will be held to be allowable:

The attention of the examiner is respectfully directed to the fact that book shelves embodying the construction set forth by the claims in the present case were offered in evidence, full size, in the interference of Jewell & Yawman *vs.* Hoffman, #13871, and that in the record in this case it appears that these shelves were made prior to the Hoffman invention. In the decisions of the examiner of interferences, the board of examiners-in-chief, and the Commissioner in this interference these facts were decided officially. This being the case, it shows beyond a reasonable doubt a completion of the applicants' invention prior to the filing of the applications on which the Hine patent, #458,902, and the Babbitt patent, #420,898, are based, and, inasmuch as these patents do not contain claims for the construction claimed by the applicants, they cannot be held, under rule 75 of the rules of practice, to be proper citations.

The Harris patent cited does not show a shelf in which there are two short rollers sustained in front of the frame with a space between them for the hand. It is not seen, therefore, what bearing this patent can have on the present invention.

199 In regard to the Adams patent cited, it will be noted that it does not describe or show a *portable* shelf which can be handled and adjusted as an entirety, nor one of such construction as to permit the ready application and removal from the case of heavy books. In the Adams patent the shelf is made *a part of the case.* The two short spring-sustained rollers are not adapted to assist in sustaining the book when the latter is in place, as in the applicants' case, their office being to yield when the book is placed thereon preparatory to pushing it back onto the shelf proper, and by this yielding movement *to assist, as is stated in the specification, in forcing the book onto the rollers D D.* See lines 38 to 58 of the Adams specification. The front edge of the shelf proper in this patent terminates some distance in the rear of the front edge of the side walls of the case, and, inasmuch as it is not customary for the front edge of the book to project beyond the case, it follows that when the book is in place it will be supported entirely by the rollers D within the case. This being so, it is obvious that in the patent the space between the short rollers does not answer the purpose of the space in the applicants' construction, nor was it ever intended to be used in the same manner or for the same purpose.

It may be properly remarked in this connection that the Hoffman patent referred to, which was in interference with the above-entitled application and which covers a shelf of the same general description, was before the supreme court of the District of Columbia in the case of The Fenton Metallic Manufacturing Co. *vs.* Charles E. Birckhead and The Office Specialty Manufacturing Co., in equity,

#13793. In this case one of the defenses set up was the
200 Adams patent above referred to, but the court held in substance that the Adams patent was not an anticipation of the Hoffman patent, and that the latter covered a patentable invention.

The relation of the present invention and that covered by the Hoffman patent *are* such that if the Adams patent is not an anticipation of the Hoffman patent it would naturally follow under the peculiar circumstances that it is not an anticipation of the present invention.

It will be noted that *in* the Jewell & Yawman specification, page 2, lines 15 to 18, specifically disclaims the Adams construction. The present claims specify the shelf as a portable one, thus distinguishing clearly the construction from that shown in the Adams patent.

In view of the foregoing remarks, it is thought that applicants are entitled to the claims as presented.

Respectfully,

P. T. DODGE,
Att'y for Jewell & Yawman.

201 Jewell & Yawman. Roller book shelves. December 5, 1891.
Application for patent. #414,104.

Hon. Commissioner of Patents.

SIR: We hereby amend as follows:

Claim 2, in the first line, *cancel the words "in a book shelf"* and *substitute "as a new article of manufacture a portable book shelf comprising."*

Claim 3, line 1, cancel *the words "in a book shelf the combination of"* and *substitute "as a new article of manufacture a portable book shelf comprising."*

Respectfully,

M. R. JEWELL,
P. H. YAWMAN,
By P. T. DODGE, *Att'y.*

Jan 26, '94.

202 Room No. 250.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Any communication respecting this application should give the serial number, date of filing, and title of invention.

A. H. W.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *February* 12, 1894.
Mailed " " "

Subject: Roller book shelf. Filed Dec. 5, 1891. No. 414,104.

Major Romeyn Jewell, care Philip T. Dodge, Esq., Washington, D. C.:

Please find below a communication from the examiner in charge of [your]* application above noted.

JOHN S. SEYMOUR,
Commissioner of Patents.

* Words and figures enclosed in brackets erased in copy.]

The claims are each rejected on the patent to Harris in connection with the patent to Adams, both of record, there being no invention involved in fastening the rollers shown in the latter patent to the straight bar shown in the former patent as extending across the front from end to end.

C. H. RICHARDSON,
Acting Examiner.

P. E. C.

203 Room No. 250.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Any communication respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *October* 21, 1895.
Mailed " " "

Major Romeyn Jewell, care Philip T. Dodge, Esq., Washington, D. C.:

Please find below a communication from the examiner in charge of your application for roller book shelf, filed December 5, 1891; serial No., 414,104.

JOHN S. SEYMOUR,
Commissioner of Patents.

This application has been re-examined under the provisions of amended rule 65, published February 19, 1895, 70 O. G., page 927, and the last official action is herewith repeated and made final, attention being called to amended rule 134.

J. McROBERTS,
Acting Examiner.

204 Hon. Commissioner of Patents.

SIR: In the matter of the application of Jewell & Yawman, roller book shelves, filed December 5, 1891, No. 414,104, I hereby appoint Messrs. Church & Church, of Washington, D. C. (a firm composed of Melville and J. B. Church), my associate attorneys, with power to prosecute said application and do all things needful in the premises.

Please address all communications to said attorneys.

PHILIP T. DODGE, *Att'y.*

Jan. 28, '96.

205 M. R. Jewell & C. H. Yawman. Roller shelf. Filed Dec. 5, 1891. No. 414,104.

Hon. Commissioner of Patents.

SIR: *Please amend the above-entitled case by cancelling the specification and claims and inserting:*

"Our present invention has for its object to provide as a new article of manufacture a portable, roller book shelf that
B'. is, a book shelf which may be handled as an entirety and easily constructed, which shall possess strength, and be adapted to permit the ready application and removal of heavy books.

To this end we construct our shelf with a strong self-sustaining metal frame, having therein, one or more horizontal rear rolls, and also having at the front a strong cross-bar extending continuously from one end to the other with two short, exposed rolls supported in brackets secured to the front cross-bar.

In the drawing the figure represents a plan view of a shelf constructed in accordance with our invention.

This shelf is, in the present embodiment of our
bar
Per C. invention, composed of a ʌ [strip]* a' of iron or steel the ends being bent back and connected by one or more suitable longitudinal strips or bars, a and a^2, extending parallel with the front portion
these parts constituting a rigid frame
" " of bar a'; ʌ E E', indicate rollers journaled at the
end pieces
" " ends in the [backwardly extending parts]* ʌ of the frame so as to turn freely, and these rollers are adapted to support the books when laid on their sides upon
said rollers
[them.]* Attached to the front of the front side of
206 the bar a' are two U-shaped brackets C^4 having in their outwardly extending ends short rollers C, the aggregate length of which is less that the length of the front bar, and said brackets and rollers are so positioned upon the front bar a' as to leave a space or hand hole between them so that, when a book rests upon the supporting rollers on its side, its back projecting over the two short rolls C C, the operator may readily grasp said book and remove it. The location of the rolls C C forward of the front bar effectually prevents the marring of the covering of the book when it is applied to the shelf, and particularly in this the case when the shelf is supported at an elevation and the operator is obliged to reach up to insert the book.

These shelves may be applied to any suitable frame or case, being of course supported at the ends and the brackets, containing the rollers being each complete, may be applied

[* Words and figures enclosed in brackets erased in copy.]

at such distances apart on the front bar as will form the proper hand hole or space between them to enable the book to be readily grasped and manipulated.

It is not essential that the precise form of the frame shown be employed, as long as the roller brackets are separate structures and may be applied to the front side of the front bar.

We claim as our invention—

As a new article of manufacture a portable book shelf, consisting of a rigid frame having one or more rear rollers and a continuous bar across the front, from end to end, the U-shaped brackets containing rollers and attached to the front of said front bar, the said brackets being separated to permit the introduction of the hand between them."

Also cancel figures 1, 2, and 4 of the drawing and erase
207 the number of figure 3.

Respectfully,

M. R. JEWELL,
P. H. YAWMAN,
By CHURCH & CHURCH,
Assoc. Att'ys.

A reconsideration of this case as now presented will show that the new claim covers features not contained in the reference cited and possessing advantages over anything shown to be old. The roller brackets can be applied to such parts of the front bar as desired and the hand holes arranged to suit the particular use for which the shelf is designed without the necessity of constructing the shelf *as an entire structure* with reference to the hand holes, as must be done in the alleged anticipating structures.

There has been no disposition to intentionally delay the prosecution of this case, and it is now believed to be in condition for allowance.

Resp'y,

CHURCH & CHURCH,
Asso. Att'ys.

208 Room No. 250.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Any communication respecting this application should give the serial number, date of filing, and title of invention.

A. H. W.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *February* 10, 1896.
Mailed " " "

Major Romeyn Jewell, care Church and Church, Washington, D. C.:

Please find below a communication from the examiner in charge of your application for roller book shelf, filed December 5, 1891; serial No., 414,104.

JOHN S. SEYMOUR,
Commissioner of Patents.

In the description the part *a'* is sometimes termed a "strip" and sometimes a "bar." It is supposed that by the words "a rigid frame" in the claim the part *a'* is intended. If so, the specification should uniformly term this part a frame; otherwise the terms of the claim are not certain as to their meaning.

J. McROBERTS,
Acting Examiner.

D. G. P.

209 Jewell & Yawman. Roller shelf. Filed Dec. 5, 1891. No. 414,104.

Hon. Commissioner of Patents.

SIR: Please *amend the above-entitled case as follows:*

Page 1, line 2 of *paragraph* 4, of *specification, erase* "*strip*" and *insert* "*bar;*" line 5, *after* "*bar*" *a, insert* "*these parts constituting a rigid frame;*" line 6, *erase* "*backwardly extending parts*" and insert "*end pieces.*"

These amendments would seem to remove the objections pointed out in the last office letter, and favorable action is requested.

Respectfully, CHURCH & CHURCH,
Att'ys for Applicants.

Feb'y 28, '96.

210 414,104.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *March* 10, 1896.

Major R. Jewell and Philip H. Yawman, ass'or-, c. o. Church & Church, assoc., city.

SIR: Your application for a patent for an improvement in roller book shelves, filed Dec. 5, 1891, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date, and on which their term begins to run; but to do this properly applicants will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, photolithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, distinctly and

plainly written, the name of the inventor and title of inven-
211 tion as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the names of the assignees.

If you desire to have the patent issue to assignees, an assignment containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 10 cents each. The money should accompany the order.

Very respectfully, JOHN S. SEYMOUR,
Commissioner of Patents.

After allowance and prior to payment of the final fee applicants should carefully scrutinize the description to see that their statements and language are correct, as mistakes not incurred through the fault of the office and not affording legal grounds for reissues will not be corrected after the delivery of the letters patent to the patentee or his agent.

[Printed on the margin:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same, satisfactory reasons must be given therefor on or before the payment of the final fee.

[Printed across the face:] In remitting the final fee give the serial number at the head of this notice.

212 *Memorandum of Amount Received. Fee Paid at U. S. Patent Office.*

$20.

(Be careful to give correct serial No.)

Chief clerk.

Serial No., 414,104. 18—.

Inventor:
M. R. Jewell and P. H. Yawman.

Patent to be issued to—
—— ——.

Name of invention as allowed:
Roller book shelf.

Date of payment:
March 12, 1896.

Fee:
Final, $20.

Date of filing.
Dec. 5, 1891.

Date of circular of allowance:
March 10, 1896.

The Commissioner of Patents will please apply the accompanying fee as indicated above.

CHURCH & CHURCH, *Attorney-*.

Send patent to—
Church & Church, 617 7th street N. W., patent law, Washington, D. C.

213 (Serial number,) 414,104. 1891. (Ex'r's Book) 3 1 1 1

Patent No. 557,392.

Major Romeyn Jewell and Philip H. Yawman, ass'or- to the Office Specialty Manufacturing Company, of same place.

Of Rochester,
County of ——,
State of New York.

Invention: Roller book shelf.

Parts of application filed.
- Petition, Dec. 5, 1891.
- Affidavit, " " "
- Specification, " " "
- Drawing, 2 sh'ts, " " "
- Model, none.
- Specimen, ——.
- First fee, cash, 15, Dec. 5, 1891.
- " " cert., ——.

App. filed complete Dec. 5, '91.
Examined Mar. 7, '96. J. McRoberts, act'g ex.
Countersigned: J. W. Babson, for Commissioner.
Notice of allowance, March 10, 1896.
Final fee, cash, $20, Mar. 12, 1896.
" " cert., ——, 189–.
Patented March 31, 1896.
Philip T. Dodge, city.
Asso. Church and Church, Washington, D. C.

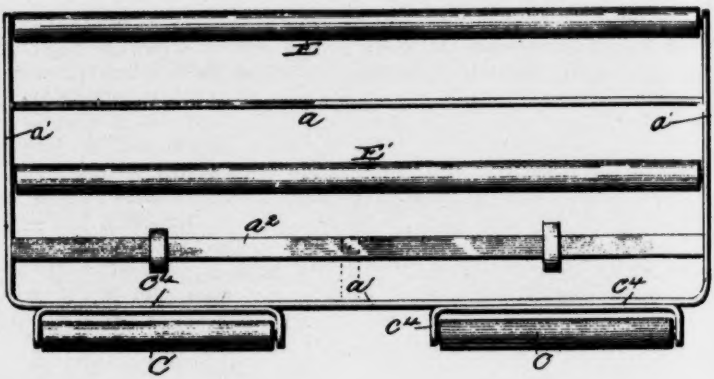
11283

(No Model.)

M. R. JEWELL & P. H. YAWMAN.

ROLLER BOOK SHELF.

No. 557,392. Patented Mar. 31, 1896.



Nos. 726. v 727.

Fenton Metallic Mfg. Co. et al.
vs.
The Office Specialty Mfg. Co. et al. } Page 218

Witnesses
L. C. Hills
J. L. Chase

Inventors:
M. R. Jewell
P. H. Yawman
By Phil. V. Dodge Attorney

Contents.

½. Application, 1 papers. O K.
1. Letters to office, Dec. 8, 18[91.]*
2. Supplemental oath, Dec. 14, 1[891.]*
3. Rej., Jan. 23, [1892.]*
4. Amend't A, Jan. 26, 18[94.]*
5. Rej., Feb. 12, 1894.
6. Rej., final, Oct. 21, 1895.
7. Asso. power of att'y, Jan. 28, 18[96.]*
8. Amend't B, Jan. 31, 18[96.]*
9. Letter, Feb. 10, 1896.
10. Amend't C, Feb. 28, 1[896.]*
11.
12.
13.
14.
15. 45. Furniture.
16. Book-cases, roller shelves.
17.
18.
19.
20.
21.
22.
23.

Title: Improvement in roller book shelves.

(Here follows drawing marked page 215.)

[* Words and figures enclosed in brackets erased in copy.]

MAJOR ROMEYN JEWELL and PHILIP H. YAWMAN, of Rochester, New York, assignors to the Office Specialty Manufacturing Company, of same place.

Roller Book-shelf.

Specification forming part of Letters Patent No. 557,392, dated March 31, 1896. Application filed December 5, 1891. Serial No. 414,104. (No model.)

To all whom it may concern:

Be it known that we, Major Romeyn Jewell and Philip H. Yawman, of Rochester, in the county of Monroe and State of New York, have invented certain improvements in roller book-shelves, of which the following is a specification.

Our present invention has for its object to provide as a new article of manufacture a portable roller book-shelf—that is, a book-shelf which may be handled as an entirety and easily constructed, which shall possess strength, and be adapted to permit the ready application and removal of heavy books. To this end we construct our shelf with a strong self-sustaining metal frame having therein one or more horizontal rear rolls, and also having at the front a strong cross-bar extending continuously from one end to the other with two short exposed rolls supported in brackets secured to the front cross-bar.

In the drawing the figure represents a plan view of a shelf constructed in accordance with our invention.

This shelf is, in the present embodiment of our invention, composed of a bar a' of iron or steel, the ends being bent back and connected by one or more suitable longitudinal strips or bars a and a^2, extending parallel with the front portion of bar a', these parts constituting a rigid frame.

E E′ indicate rollers journaled at the ends in the end pieces of the frame, so as to turn freely, and these rollers are adapted to support the books when laid on their sides upon said rollers.

Attached to the front of the front side of the bar a' are two U-shaped brackets C^4 having in their outwardly-extending ends short rollers C, the aggregate length of which is less than the length of the front bar, and said brackets and rollers are so positioned upon the front bar a' as to leave a space or hand-hole between them, so that when a book rests upon the supporting-rollers on its side, its back projecting over the two short rolls C C, the operator may readily grasp said book and remove it.

The location of the rolls C C forward of the front bar effectually prevents the marring of the covering of the book when it is applied to the shelf, and particularly is this the case when the shelf is supported at an elevation and the operator is obliged to reach up to insert the book.

Fig. 1.

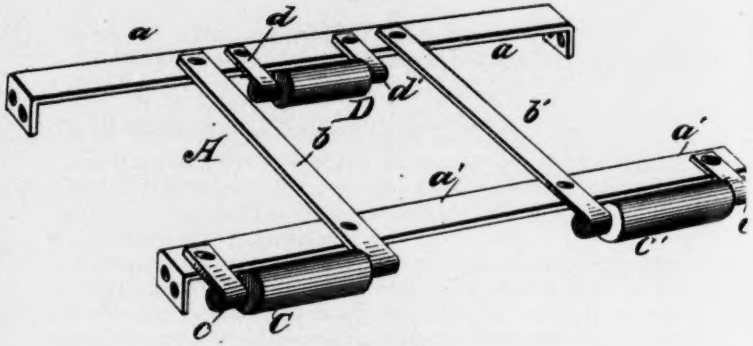
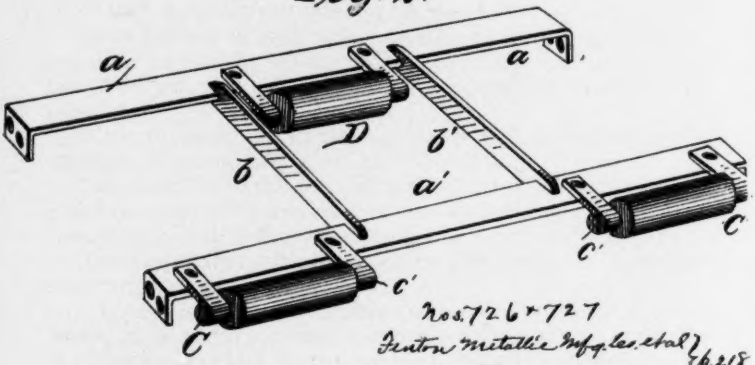


Fig. 2.



Nos. 726 & 727
Denton Metallic Mfg. Co. et al
Office Specialty Mfg. Co. et. al
} b. 218

Witnesses:
L. C. Hills
F. J. Elmore.

Inventor:
M. R. Yowell
P. H. Bowman
By Phil T. Dodge
atty.

Fig. 3.

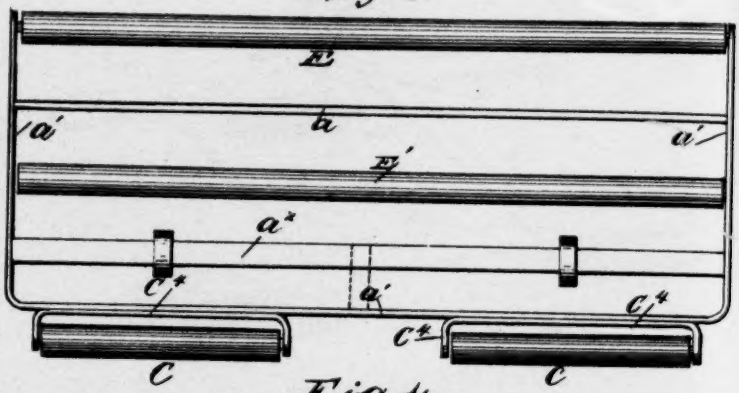
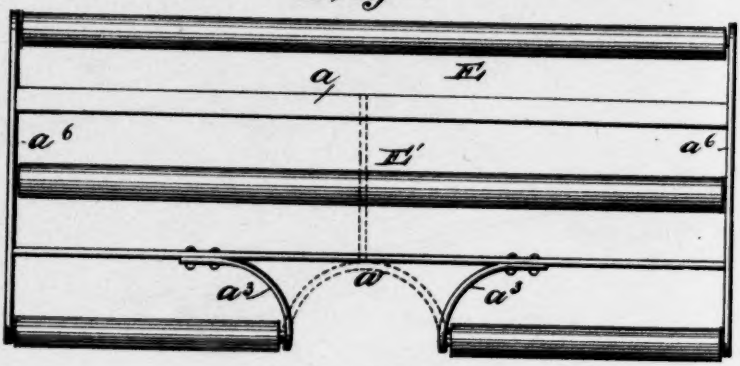


Fig. 4.



Nos. 726-727
Fenton Metallic Mfg. Co. et al.
Office Specialty Mfg. Co. et al. } Page 2/9

Witnesses:
L. C. Hills.
F. J. Elmore.

Inventor:
M. R. Jaudl
P. H. Bauman
By Phil S. Dodge Atty.

These shelves may be applied to any suitable frame or case, being of course supported at the ends, and the brackets containing the rollers being each complete may be applied at such distances apart on the front bar as will form the proper hand-hole or space between them to enable the book to be readily grasped and manipulated.

It is not essential that the precise form of the frame shown be employed as long as the roller-brackets are separate structures and may be applied to the front side of the front bar.

We claim as our invention—

As a new article of manufacture a portable book-shelf, consisting of a rigid frame having one or more rear rollers and a continuous bar across the front, from end to end, the U-shaped brackets containing rollers and attached to the front of said front bar, the said brackets being separated to permit the introduction of the hand between them.

In testimony whereof we hereunto set our hands this 1st day of October, 1890, in the presence of two attesting witnesses.

MAJOR ROMEYN JEWELL.
PHILIP H. YAWMAN.

Witnesses:
ALBRECHT BUEDINGEN.
LIBBIE A. WEBER.

217 *Copy of Drawing Originally Filed as a Part of the Jewell & Yawman Application of December 5, 1891.*

MEMORANDUM.—This is to certify that the annexed is a true copy from the records of this office of the drawings as originally filed, December 5, 1891, in the matter of the letters patent granted Major Romeyn Jewell and Philip H. Yawman, assignors to the Office Specialty Manufacturing Company, March 31, 1896, number 557,392, for improvement in roller book shelves.

(Here follows drawings marked pages 218 & 219.)

220 *Petition, Oath, &c.*

Filed April 10, 1893.

MEMORANDUM.—This is to certify that the annexed is a true copy from the records of this office of the file-wrapper and contents in the matter of the application of Major Romeyn Jewell and Philip H. Yawman, filed November 6, 1888—serial number, 290,122—for improvement in book shelves.

221 $15.

Petition.

To the Commissioner of Patents:

Your petitioners, citizens of the United States, residing at Rochester, New York, prays that letters patent may be granted to them for the improvement in book shelves set forth in the annexed specification.

And they hereby appoint Philip T. Dodge, of Washington, D. C., their attorney with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and generally to transact all business in the Patent Office connected therewith.

M. ROMEYN JEWELL.
PHILIP H. YAWMAN.

Specification.

Specification describing certain improvements in book shelves invented by M. Romeyn Jewell and Philip H. Yawman, of Rochester, in the county of Monroe and State of New York.

222 Cases and shelves to receive large and heavy books lying on their sides have been heretofore provided with horizontal rollers to sustain or assist in sustaining the books, and to admit of their being readily inserted and removed; but as heretofore applied the rollers have required peculiar constructions of the case and the expenditure of an objectionable amount of hand labor in fitting them in place.

The aims of our invention are to provide book-sustaining rollers of such character that they may be manufactured by machinery at slight cost and placed upon the market in their supporting frames, complete and ready for use; the frame being of such character that they require simply to be screwed or bolted fast at their ends to supporting standards or slides of the case without cutting, fitting or specially constructing the case therefor.

To this end the invention consists in the new article of manufacture, a rigid frame provided with a series of rollers, the whole constructed and adapted for use substantially as hereinafter described. It further consists in certain peculiarities or details of construction which will be hereinafter set out at length and specified in the claims.

In the accompanying drawings,—

Fig. 1, represents a perspective view of our device in its preferred form.

223 Fig. 2 is a cross-section of the same on the line x x.

Fig. 3 is a perspective view of the device in a slightly different form.

Fig. 4 is a cross-section of the same on the line y y.

Fig. 5 is a front elevation showing the manner in which our device is applied in practice.

Referring to the drawings,—

A represents a strong rectangular frame containing three horizontal parallel rolls B B′ B², extending from one end of the frame to the other, and located one at the middle and one at each edge.

The frame consists of two metallic end bars, a, firmly united by two metallic cross-bars b; these cross-bars are of flat form arranged upon their sides and provided at their ends with tenons which are passed through and firmly rivetted to the end bars as shown.

Each of the rollers is formed at its two ends with journals which are extended through the end bars of the frame as shown. At the points where the journals pass therethrough the end bars
224 are bent inward, so that the journals may receive a firm support although terminated inside of the outer faces of the bars; this permits the bars to be screwed with their outer faces against the flat standard or support without causing the journals of the rollers to bind.

In order to prevent the lids of the books from passing upward or downward between the rolls we provide the forward cross-bar with guards or bolsters *c*, formed of sheet metal and riveted firmly thereto. These guards lie between and at right angles to the forward rolls, B B′, and are flush or substantially flush with the upper and lower surfaces of the rolls. Their action is plainly represented in Fig. 2, in which dotted lines indicate the cover or lid of a book inserted at an angle. The frame of the device is strong and rigid; it gives to the rollers a firm support, and also serves when inserted between vertical standards, or between the sides of a case and screwed thereto, to brace and strengthen the case. In practice it is found that a rigid case may be formed by simply erecting boards in an upright position and screwing our roller shelves firmly in place to and between them.

In Fig. 3 the frame A is slightly different in form from that represented in Figs. 1 and 2. It has the end bars *a* and the cross-bars *b* firmly connecting the same. These cross-bars are, however, bent inward toward each other at the middle and connected by a
225 cross-bar *d* lying in a fore-and-aft direction, the several parts being riveted firmly together.

Instead of the continuous roll at the front of the frame we use two short rolls with coincident axes, their outer ends being sustained by the end bars *a* and their inner ends by a curved bar *e*, riveted to the cross-bar *b* as shown. This arrangement leaves a front opening under the space occupied by the book so that the hand may be readily inserted to grasp the edge of the book in withdrawing it. In this structure the middle roll is also divided into two lengths or sections which at their inner or proximate ends receive support from the bar *d*.

The cross-bars *b* of angular form, combined with the connection *d* give to this part of our device great strength and rigidity, the bar *d* also serving as a guard or pillow to prevent the edge of the book from passing between the rolls.

In this second form of device the journals are formed on the frame and projected into the ends of the rolls. It is, however, immaterial whether they are arranged in this manner or in the manner represented in Fig. 1.

Fig. 5 illustrates the manner of applying our roller shelves, C C being standards or boards arranged in an upright position at a suitable distance to admit of our roller shelves being inserted snugly between them and without special fitting of the parts. The rollers are secured by screws *g* passing through the bars *a* into the standards.

226 Having thus described our invention, what we claim is—

Sub. A'.

1. As a new article of manufacture, a roller shelf consisting of a rigid metallic frame and a series of horizontal rolls mounted therein substantially as described and shown.

2. The portable roller shelf consisting of a rigid supporting frame and a series of horizontal rolls mounted therein, the forward roller mounted in the extreme front of and projecting beyond the remainder of the frame as described and shown.

Per A. 1. [3.][2.]* A rigid portable frame substantially as herein described, a series of horizonal rollers mounted therein, cross-bars lying between and extending in the direction of the length of said rolls, and one or more pillows or guards between the rolls Per A. secured to said cross-bars A to prevent the lids of the book from passing between the rollers.

Cancelled per A.

In a portable roller book shelf, the combination of the two end bars *a*, perforated to receive fastening screws, cross-bars *b* fixed rigidly thereto, and a series of horizontal rolls sustained at their ends by said end bars, the forward roll lying in front of the forward cross-bar.

Per A. 227 2. [5.][2.]* In a portable roller book shelf, the combination of a rigid portable supporting frame, a series of rollers therein, the front roller divided centrally into two coincident sections and supported by a retreating bar or support *e:* whereby the admission of the hand between the roller sections is permitted to grasp the book.

In testimony whereof we hereunto set our hands this 14th day of April, 1888, in the presence of two attesting witnesses.

M. ROMEYN JEWELL.
PHILIP H. YAWMAN.

Witnesses:
GEO. B. GRAHAM.
EDWIN S. JEWELL.

[Matter enclosed between rules erased in copy.]
[* Words and figures enclosed in brackets erased in copy.]

228 *Oath.*

STATE OF NEW YORK, }
County of Monroe. }

M. Romeyn Jewell and Philip H. Yawman, the above-named petitioners, being duly sworn, depose and say that they verily believe themselves to be the original, joint, and first inventors of the improvement in book shelves described and claimed in the accompanying specification; that they do not know or believe that the same was ever before known or used; that the same has not been patented to them or to others with their knowledge or consent in any country; that the same has not to their knowledge been in public use or on sale in the United States for more than two years prior to this application, and that they are citizens of the United States and residents of Rochester, New York.

M. ROMEYN JEWELL.
PHILIP H. YAWMAN.

Sworn to and subscribed before me this 14 day of April, 1888.

A. J. REIBLING,
[L. S.] *Notary Public.*

229 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Jan.* 7, 1889.
Mailed " 8, "

Book shelves. Nov. 6, 1888. No. 290,122.

249.

Jewell & Yawman, care P. T. Dodge, city:

Claim 1 is rejected upon patent to Reed, No. 359,691, Mar. 22, 1887 (book shelves).

Claim 2 is rejected upon Conant, No. 316,241, Apr. 21, 1885.

Claim 3 is indefinite. It should specify the arrangement of the pillows which prevents the book from falling through the rolls.

Claim 4 is rejected on Reed in connection with patent to Conant. There is no invention in arranging the rollers of the former reference in the same manner as the latter or in making the shelves of the latter reference portable.

FRANK C. SKINNER, *Examiner.*

230 Exam., Woodward. Room 249.

Jewell & Yawman. Book shelves. November 6, 1888. No 290,122. Application for patent.

Hon. Commissioner of Patents.

SIR: I hereby amend as follows:

Cancel claims 1 and 2 and substitute the following:

[A'.]* Cancelled.

Per B.

1. As a new article of manufacture the portable metal shelf, consisting of longitudinal bars, the end bars rigidly attached thereto and projected at the front, and the horizontal roll mounted in the projecting ends of the end bars and extending forward of the remaining portions of the shelf.

Claim 3, line 5, after "*bars*" insert ("*between the rolls.*")

Cancel claim 4.

Respectfully, etc., PHIL. T. DODGE,
Att'y for Jewell & Yawman.

231 Jewell & Yawman. Book shelves. November 6, 1888. No. 290,122. Application for patent.

Hon. Commissioner of Patents.

SIR: I present herewith an amendment which will, I believe, avoid the references cited.

Applicant appears to be the first who has produced a portable shelf having a front roller adapted for transportation and sale as a complete article ready for application to an ordinary case without change or alteration in the latter.

It will be observed that Conant does not show a rigid or connected frame with rollers therein. His supporting bars E and the rollers are assembled and held in the proper relation by inserting the bars in grooves which require to be cut in the supporting case. The front rollers are not supported in the same frame as the others, or, indeed, in any frame. They are mounted simply in vertical bars which are attached to the front of the case.

As this applicant's claims are now limited to his particular construction for accomplishing the ends in view, it is believed that they may be allowed.

The device on which applicant seeks a patent is now extensively manufactured, and its rapid adoption would seem to be a strong evidence of the fact that it supplied a demand not answered by other devices known in the art.

Respectfully, etc., PHIL. T. DODGE, *Att'y, &c.*

[Matter enclosed between rules erased in copy.]
[*Words and figures enclosed in brackets erased in copy.]

232 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Feb.* 20, 1889.
Mailed Feb. 20, 1889.

Book shelves. No. 290,122. Nov. 6, 1888.

249.

Jewell & Yawmans, care P. T. Dodge, city:

Claim 1 is rejected on the references and for the reasons cited against claim 4 in the last official letter.

FRANK C. SKINNER, *Examiner.*

233 Jewell & Yawman. Book shelves. November 6, 1888. No. 290,122. Application for patent.

Hon. Commissioner of Patents.

SIR: I hereby amend
by canceling claim 1.
Respectfully, etc.,

PHIL. T. DODGE,
Att'y for Jewell & Yawman.

234 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June* 1, 1889.
Mailed " 1, "

Book shelves. Nov. 6, 1888. No. 290,122.

249.

Jewell and Yawman, care P. T. Dodge, city:

Applicant's claims as drawn at present are for two separate and distinct species, both of which cannot allowably be prosecuted in one application, and applicant must elect which he will further prosecute in this case.

In view of a probable interference applicant is allowed ten days within which to put his case in condition for allowance.

ROB'T P. HAINS,
Acting Examiner.

235 Jewell & Yawman. Book shelves. Nov. 6, 1888. No. 290,122. Application for patent.

Hon. Commissioner of Patents.

SIR: Replying to the official letter of June 1, 1889, attorney respectfully calls attention to the fact that the guards or pillows of the first claim are applicable to the frame covered in the 2d claim in the same manner and with much the same effect that they are used on frames of other forms. Applicant- illustrated the guards on the frame on which they are shown simply to show one of their applications, not because they were to be used on that frame alone or because they were supposed to have any peculiar or social rela-

tionship to that frame as distinguished from others. As the subject-matter of both claims may be used in one shelf or frame, they are not equivalent or alternative features, and the claims cannot be said in the sense of the Eagle decision to be for distinct species.

A reconsideration is asked.

Respectfully, etc.,

PHIL. F. DODGE,
Att'y for Jewell & Yawman.

236 Ex'r of interferences, Jun- 28, 1889.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June* 24, 1889.

M. R. Jewell and Philip H. Yawman, care P. T. Dodge, city:

Please find below a copy of a communication from the examiner concerning your application for book shelves, filed Nov. 6, 1888; serial number, 290,122.

Very respectfully,

C. E. MITCHELL,
[W. E. SIMONDS,]*
Commissioner of Patents.

Room No. 249.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 110 must be sealed up and filed on or before the 23 day of July, 1889, with the subject of the invention and name of party filing it indorsed on the envelope. The interference number should also be indorsed thereon. The subject-matter involved in the interference is:

In a portable roller book shelf the combination of a rigid supporting frame, a series of rollers therein, the front roller divided centrally into two coincident sections and supported by a retreating bar or support whereby the admission of the hand between the roller sections is permitted to grasp the book.

237 Included in the case and claim 2 of applicants and in the case and claim of Edmond H. Babbitt, of St. Louis, Mo., and whose attorney of record is C. D. Moody, of St. Louis, Mo.

ROB'T P. HAINS,
Acting Examiner.

[* Words and figures enclosed in brackets erased in copy.]

Jewell & Yawman. Book shelves. November 6, 1888. No. 290,122. Application for patent.

Hon. Commissioner of Patents.

SIR: Attention is directed to the fact that the interference in which the above entitled application was involved has now been decided and the limit of appeal has expired. Action on the case is therefore respectfully requested at an early day.

Respectfully, etc.,

P. T. DODGE,
Att'y for Jewell & Yawman.

238

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sep.* 14, 1889.
Mailed " " "

Book shelves. Nov. 6, 1888. 290,122.

249.

M. R. Jewell and P. H. Yawman, care P. T. Dodge, city:

In view of a probable interference, action on the above case is suspended for the period of ten days, at the expiration of which time the case should be formally called up by applicant- for further action.

ROB'T P. HAINS,
Acting Examiner.

Jewell and Yawman. Book shelves. Filed Nov. 6, '88. Ser. No., 290,122. Application for patent.

Hon. Commissioner of Patents.

SIR: As the ten days, the period for which the above-entitled case was suspended, has now expired, the allowance of the application is respectfully requested.

Respectfully, etc.,

P. T. DODGE,
Att'y for Jewell and Yawman.

239

Ex'r of interferences, Oct. 25, 1889.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Oct.* 16, 1889.

Jewell & Yawman, care P. T. Dodge, city:

Please find below a copy of a communication from the examiner concerning your application for book shelves, filed Nov. 6, 1888; serial number, 290,122.

Very respectfully,

C. W. MITCHELL.
W. E. SIMONDS,
Commissioner of Patents.

Room No. 249.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 110 must be sealed up and filed on or before the 15 day of Nov., 1889, with the subject of the invention and name of party filing it indorsed on the envelope. The interference number should also be indorsed thereon. The subject-matter involved in the interference is:

In a book shelf the combination of a supporting frame, a series of horizontal rollers carried thereby, a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections.

Included in the case and claim 2 of applicants and in the case and claims 5 and 10 of H. J. Hoffman, of Milwaukee,
240 Wis., and whose attorneys of record are Foster & Freeman, of Washington, D. C.

ROB'T P. HAINS,
Acting Examiner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Mar.* 18, 1891.
Mailed " 19, "

Book shelves. Nov. 6, 1888. No. 290,122.

250.

Jewell & Yawman, care P. T. Dodge, city:

The interference in which claim 2 of this case was involved having been decided unfavorably to applicant-, said claim is finally rejected.

G. S. ELY, *Examiner.*

P. E. C.

241 Inventors: Major Romeyn Jewell and Philip H. Yawman.
Improvement in book shelves.
Examiner: Hains, class No. 45.
Patent No. —. Serial No., 290,122. Filed Nov. 6, 1888.

BRIEF.
If convenient, write the brief between these lines; if too long, extend below.

....
....
.....
.....
....
....
....
.....
....
....

Illustrate with Fig. 3. *No model.*
Number of claims allowed: 2.

242 (Serial number,) 290,122. 1888. (Ex'r's Book) 106 1503.

Clarke.* E. L. Y.*
Patent No. —.
Major Romeyn Jewell and Philip H. Yawman,
Of Rochester,
County of ——,
State of New York.
Invention: Book shelves.
Parts of application filed.
Petition, Nov. 6, 1888.
Affidavit, " " "
Specification, " " "
Drawing, " " "
Model not required.
Specimen, ——.
2. First fee, cash, $15, Nov. 6, 1888.
" " cert., ——.
1. App. filed complete Nov. 6, 1888.
Ack'l'd Nov. 8, '88.

[* In pencil in copy.]

Examined June 18, 1889. Rob't P. Hains, act'g ex.
Countersigned: —— ——, for Commissioner.
Notice of allowance, ——, 188–.
Final fee, cash, ——, 188–.
" " cert., ——, 188–.
Patented ——, 188–.
Att'y or P. O. address: P. T. Dodge, city.

243 1888.

Contents.

½. Application, 1 papers.
1. Rejection, Jan. 7, 1889.
2. Am'd't A, Feb. 9, 1889.
3. Rej., Feb. 20, '89.
4. Am'd't B, May 24, '89.
5. Letter, June 11, 1889.
6. Letter to office, June 7, 1889.
7. Letter of interf., June 24, 1889.
8. Intf. favorable, July 27, 1889.
9. Letter to office, Aug. 30, 1889.
10. Letter, Sept. 14, 1889.
11. Letter to office, Sept. 25, 1889.
12. Letter of intf., Oct. 16, 1889.
13. Intf. unfavorable, Dec. 7, 1889.
14. Final rej., Mar. 18, '91.
15.
16.
17.
18.
19.
20.

Title: Improvement in book shelves.

244 COMPLAINANT'S EXHIBIT "A."

Filed March 18, 1892.

Memorandum.

This is to certify that the annexed is a true copy from the records of this office of the specification and drawing as it stood at the date of declaration of interference in the matter of the letters patent granted Horace J. Hoffman, assignor, by mesne assignments, to the Fenton Metallic Manufacturing Company, April 7, 1891, number 450,124, for improvement in storage cases for books, &c.

245 HORACE J. HOFFMAN, ass'or, by mesne ass'g'ts, to the Fenton Metallic Manufacturing Company of New York.

Improvement in Storage Cases for Books, &c.

Specification forming part of Letters Patent No. 450,124, dated April 7, 1891. Cert. spec. as it stood at the date of declaration of intf.

To all whom it may concern:

Be it known, that I Horace J. Hoffman of the city and county of Milwaukee and State of Wisconsin, have invented certain new and useful improvements in storage cases for books etc. and I do hereby declare that the following is a full, clear and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification:

The object of my invention is to facilitate the handling and prevent the abrasion and injury of heavy books, etc. It consists essentially of the peculiar arrangement of the guiding and supporting rollers and of the peculiarities in the construction of the case and shelves hereinafter specifically set forth.

In the accompanying drawing like letters designate the same parts in the several figures. Fig. 1 is a perspective view of
246 a cabinet or case embodying my improvements; Fig. 2 is a plan view on an enlarged scale of one of the shelves or book-supporting racks; Fig. 3 is a vertical cross-section of the same on the line *x x*, Fig. 2; Fig. 4 is a sectional detail of one of the upright guide-roll bearings, showing also the method of securing the book shelves or racks in the case, and Fig. 5 is a horizontal section taken on the line *y y*, Fig. 4.

A represents the cabinet or case which is preferably formed of heavy sheet iron, with or without a back as desired. B is one of the book-supporting shelves or racks composed of a metallic frame in which are mounted rollers for guiding and supporting the books, etc. This metallic frame is preferably formed of heavy band iron, in sections *c*, c^1, c^1, c^2, and c^3, c^3.

The section *c* forming the back of the rack extends from side to side of the case A and is bent forward at each end at right angles and perforated or notched, as shown in Fig. 4, to receive the bolts a^1 a^1, by which the rack is secured at the rear to said case. The two sections c^1 c^1 are attached to the section *c* a short distance inside of the ends thereof, extend from the back to the front of the case and are bent outward at right angles to meet the sides of the case and again back at right angles at their ends, which are perforated or notched, as seen in Fig. 4, to receive the bolts a^1 a^1 supporting the frame at the front and securing the same to the sides of said case. The middle U-shaped section c^2 is attached at its ends; to the rear section *c* and extends from the back to the front of the case parallel with the sections c^1 c^1 and forms the center of the front side of the frame which is bent inwardly at c^4, thus exposing a portion

of the book to the grasp and facilitating its removal from the
247 case. Cross-sections c^3 c^3 parallel with and a little to the rear of the front of the roller frame connect and brace the sections c^1 c^1 and c^2.

Rollers n n^1 made of iron, wood or any suitable material are mounted, as shown in Fig. 2, in pairs parallel with the front and rear edges of the rack B between the sections c^1 c^1 and c^2, which are perforated and furnish bearings for the journals of said rollers. One of each pair of said rollers, preferably the front one n, is set above the other and projects above the roller frame, as seen in Fig. 2, so as to support a book out of contact with said frame. The rear rollers n^1 n^1 of each pair are made to project below the roller frame and thus prevent the book on the rack next below, when tilted in removing or inserting the same in the case, from rubbing against said frame.

By thus arranging one set of rollers below the other each set operates independently and when a book is resting upon the rollers n n, and a book being placed upon or removed from the shelf or rack next below engages any of the rollers n^1 n^1 they will turn freely without effect upon the book resting above on the roller n n.

If desired, rollers n^2 n^2 may be placed between the side limbs of section c^2 of the roller frame on a level with the rollers n n to prevent the book from sagging at the center. For supporting all ordinary sizes of books, however, the rollers n n, if properly disposed are sufficient without the rollers n^2 n^2.

The front rollers n n are set as seen in Figs. 2 and 3 in front of the cross-sections c^3 c^3 of the roller frame and project slightly
248 in front of and above said frame, so as to prevent contact between said frame and a book whenever the latter is inserted in, or removed from the case A at any inclination to the racks B.

At the ends of the racks B, just in advance of the sides of case A and projecting a little inside of the same, I provide the upright rollers D D, which are journaled in brackets d d secured to the sides of said case A, as seen in Figs. 4 and 5.

For convenience in moving the case, two short upright rollers D^1 D^1 may be set in advance of the rollers D D in extensions d^1 d^1 of the brackets supporting the adjacent ends of said rollers D D, as shown in Fig. 1.

Said rollers D^1 D^1 serve not only as handles for moving the case but also in place of rollers D to prevent the ends of a book placed on the adjacent rack B from rubbing against the side of said case. The brackets d d not only furnish bearings for the upright rollers D D, but serve also to connect and retain in place the upright parts of the case adjacent to and forming the slots a a.

I claim:

1. In a storage case for books, etc., a supporting rack composed of a roller frame or shelf and two sets of rollers journaled therein, one set projecting above, and one below, the other, substantially as and for the purposes set forth.

2. In a storage case for books, etc., the combination of supporting racks or shelves and upright rollers supported at the ends of said

Fig. 1.

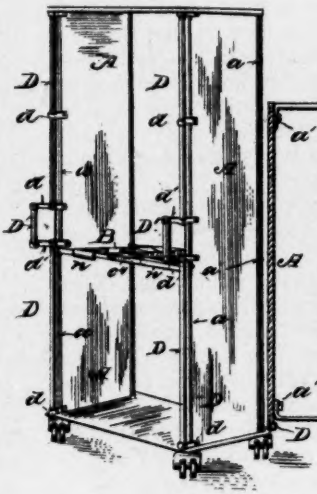


Fig. 2.

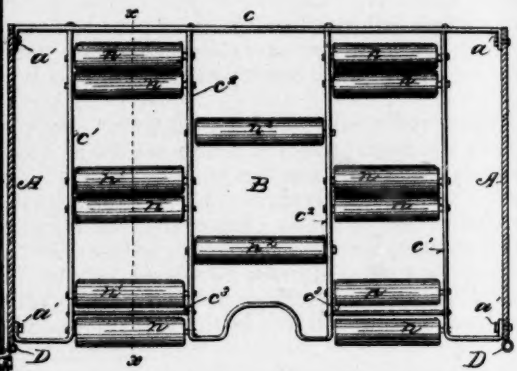


Fig. 3.

Fig. 4.

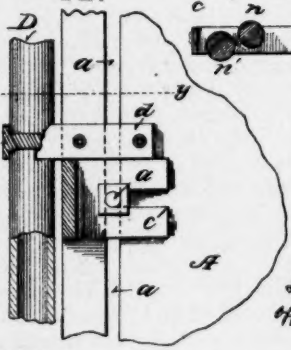
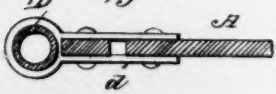


Fig. 5.



Nos. 726 & 727
Fenton Metallic Mfg. Co. et al
vs
Office Specialty Mfg. Co. et al

Witnesses:
Chas L. Goss
George M. Goll

Inventor:
Horace J. Hoffman
By Dyer & Potts
Attorney

racks or shelves in brackets attached to the sides of said case for which they serve as a finish or jambs, substantially as and for the purposes set forth.

249 3. The combination of a portable storage case provided with casters, horizontal supporting racks or shelves and upright rollers forming handles for moving said case and arranged to prevent a book or the like on the adjacent shelf or shelves from rubbing against the sides of said case, substantially as and for the purposes set forth.

4. In a storage case for books, etc., the combination of a portable cabinet or case, vertically adjustable shelves or racks, horizontal rollers journaled in said shelves or racks and upright rollers supported in suitable bearings at the ends of said shelves or racks, substantially as and for the purposes set forth.

5. In a storage case for books, etc., the combination of a supporting rack or shelf composed of metallic strips and having a reentrant bend or recess in its front edge and rollers journaled in said rack and projecting above, and in front of, the same, on each side of said bend or recess, substantially as and for the purposes set forth.

6. In a storage case for books, &c., a supporting rack, frame or shelf, supporting a plurality of rollers projecting above its upper surface, and also a roller projecting below the lower surface of the first-named rollers, substantially as described.

7. The combination with a case provided with horizontal rollers and supports therefor, of upright rollers arranged adjacent to the ends of the horizontal rollers, and supports for said upright rollers, substantially as described.

250 8. The combination of a shelf or rack, with the parallel horizontal rollers journaled therein, and the vertical rollers arranged at the sides thereof, substantially as described.

9. The combination with horizontal racks, supporting horizontal parallel rollers, of upright rollers journaled in brackets adjacent to the sides of the racks, substantially as described.

10. In a book shelf the combination of a supporting frame, a series of horizontal rollers, the front roller in two separated sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections, substantially as described.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

HORACE J. HOFFMAN.

Witnesses:
CHAS. L. GOSS.
GEORGE M. GOLL.

(Here follows drawing marked page 251.)

252 *Stipulation.*

Filed April 13, 1892.

In the Supreme Court of the District of Columbia.

THE FENTON METALLIC MANUFACTURING COMPANY, Plaintiff,
vs.
CHARLES E. BIRCKHEAD and THE OFFICE Specialty Manufacturing Company, Defendants.
} In Equity. No. 13793.

It is hereby stipulated between counsel in the above case—

That the demurrer filed on behalf of the defendants shall be withdrawn.

That the defendants shall serve complainant's solicitor with a copy of their answer on or before the 20th day of April, 1892, and promptly thereafter file the answer in court.

That complainant after the service of defendants' answer shall have two days to file replications or take such other course as shall seem proper.

That it is admitted on behalf of the defendants and for the purposes of all future proceedings herein that the defendant The Office Specialty Manufacturing Company has since the issuance of the patent in suit, of which Exhibit A is a copy, and prior to the filing of the complainant herein, had and maintained an office in the city of Washington, in this District, and employed there after the
253 issuance of the patent and before the filing of this complaint the defendant Charles E. Birckhead, and that during this period the defendant Birckhead, as agent for the defendant's company and for said company, circulated catalogues like the one now on file in this court, marked "Complainant's Exhibit Office Specialty Manufacturing Co.'s Catalogue," which is hereby offered in evidence by complainant, and issued and exhibited at said office a case containing shelves constructed substantially as shown in "Exhibit Hansmann's Sketch," now on file in this court and hereby offered in evidence by complainant, and, furthermore, that cases having such shelves and shelves of the kind illustrated by Fig. 17 of said catalogue have been sold during said period by the defendant company in this District and elsewhere in the United States.

That the affidavits now on file in this court of F. L. Freeman, J. W. Hine, and Frank Osborn may be, and are hereby, offered as testimony on behalf of complainant with the same force and effect as if the same parties had been duly called, sworn, examined, and had given the same testimony by deposition.

That complainant hereby offers in evidence a Patent Office printed copy, marked "Complainant's Exhibit A," of the specification and drawing of U. S. patent No. 450,124, granted April 7, 1891, to complainant, as assignee of Horace J. Hoffman, for an improve-

EXHIBIT.
S. H. HARRIS.

Safe Case for Record Books.

No. 107,042.

Patented Sept. 6, 1870.

Fig. 1.

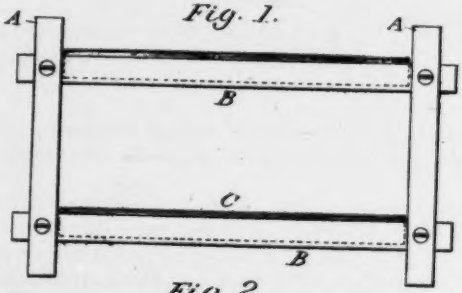


Fig. 2.

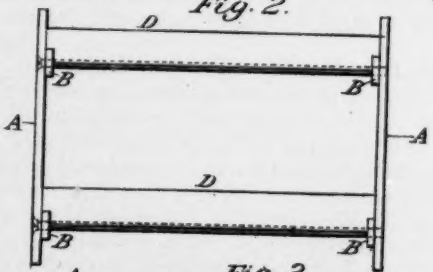
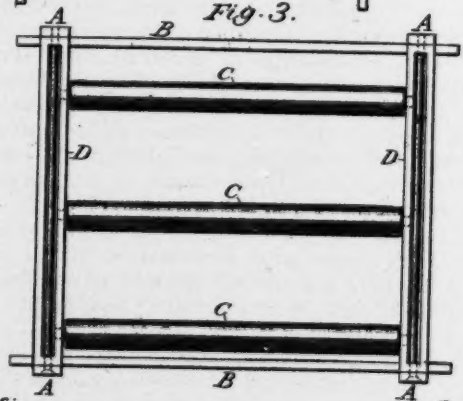


Fig. 3.



Witnesses:

L. L. Cashum
H. Burns

Inventor:

Samuel H. Harris

Nov. 726 v 727
Seaton McTavish Mfg. Co. et al
Office Specialty Mfg. Co. et al. } Page 206

ment in storage cases for books, it being agreed that this copy and all other Patent Office printed copies of specifications and drawings of U. S. patents which may hereafter be offered in evidence on behalf of any of the parties shall have the same force and effect as if the original patent or patents or duly certified copies thereof had been offered in evidence.

254 That complainant hereby offers in evidence certain exhibit papers now on file in this court, namely:

A duly certified copy of the certificate of incorporation of the complainant company, the same being marked "Complainant's Exhibit Certificate of Incorporation."

Also the drawing and specification marked "Complainant's Exhibit Jewell & Yawman's Tracing" and "Complainant's Exhibit Jewell & Yawman's Specification."

Also copies of the declaration of the interference mentioned in the bill of complaint and in some of the annexed affidavits, the same being marked "Exhibits B, B'."

Also copies of the three decisions rendered in the Patent Office in said interference, these copies being marked "Exhibits C, D, and E."

That complainant may have until the 23rd day of April, 1892, to take such further evidence as it may desire to take after receiving a copy of defendants' answer.

That if defendants' counsel shall desire to cross-examine any of the said affiants upon the testimony given in their affidavits he must do so before the day last named, and that if he shall desire to make any such cross-examination he must give one day's notice.

That defendants shall have until the 26th day of April, 1892, to take their testimony.

That complainant shall have until the 30th day of April, 1892, to take testimony in rebuttal.

That this case may and shall be set for hearing on the May term of this court, to be heard as early in that term as the engage-

255 ments of the court will permit, it being agreed that counsel will accept short notice of trial.

CHARLES E. FOSTER,
Of Counsel for Plaintiff.
R. D. MUSSEY,
Of Counsel for Defendant-.

Approved:
—— ——, *Justice.*

Endorsed: Let the demurrer be withdrawn. A. B. Hagner. Ap'l 13, '92.

(Here follows drawing marked page 256.)

257 UNITED STATES PATENT OFFICE.

SAMUEL H. HARRIS, of Chicago, Illinois.

Improvement in Safe-cases for Books.

Specification forming part of Letters Patent No. 107,042, dated September 6, 1870.

I, Samuel H. Harris, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful improvement in safe-cases for books, of which the following is a specification, reference being had to the accompanying drawing, and to the letters and figures marked thereon, which form a part of said specification.

The object and nature of my invention is to simplify and cheapen the manufacture of iron cases for books to be kept in fire-proof safes; and the nature of my invention consists in so locking the pieces of the frames together that a single bolt or rivet at each intersection of said pieces will fasten them together; and my invention further consists in making the roller for the fire-proof work of wood covered with thin metal, as hereinafter more fully described.

Description of the Drawing.

Figure 1 represents a front elevation of my case; Fig. 2, an end elevation, and Fig. 3 a top or plan view, of the same.

General Description.

A are the upright pieces of the frame, and B the front and rear pieces of the case, which may be made of any desirable length, as hereafter described. C are the rollers upon which the books rest, and D are cross-pieces extending across the case at the ends of the rollers, and also form bearings or supports for the rollers.

These cases are intended for record-books, and there may be a series of sets of rollers, one above another, in the same case; but it is intended that the upright pieces A will extend from the bottom to the top of the case, past all the different sets of rollers in one section of the case.

It will also be observed that the side pieces, B, may be extended, so that the same case may contain several sections of rollers, the drawing showing only one of said sections.

There is a cross-piece, D, at each end of each set of rollers, in which the rollers have bearings, and they also, by their ends resting against the upright pieces A, serve to hold them in place, and, by their ends being notched, they rest against the side pieces, B, and hold them firmly against the upright pieces A, while the pieces D are kept from being moved laterally by being let into notches in the pieces B, as clearly shown in Fig. 4; but these pieces are then locked in place by the rod or bolt E, which, by being so put into the case as not to

EXHIBIT.
J. L. BOONE.

BOOK-SHELVES.

No. 182,157. Patented Sept. 12, 1876.

Nos. 726 + 727
Fenton Metallic Mfg. Co. et al.
vs. } ϕ. 258.
Office Specialty Mfg. Co. et al.

Fig. 1

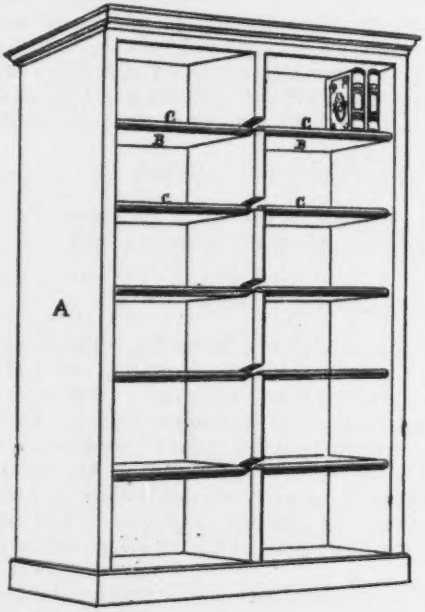
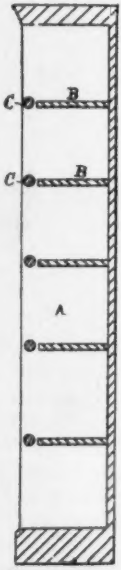


Fig. 2



Witnesses
Chas. G. Page
Alwyn T. Stacy

Inventor
John L. Boone

allow the uprights A to spread apart or the side pieces to fall down, firmly secures all the pieces of the case together.

I prefer to make a screw-bolt of the rod or bolt E, because then the case can be put together without any riveting or heading of bolts.

The rollers C are made of wood, and covered completely with sheet metal. By making them of wood, they are light, cheap, and portable, and by covering them completely with metal the wood is not exposed to fire, and the advantages of iron rollers are obtained in fire-proof work.

Claims.

I claim—

1. The pieces A, B, and D in a case for record-books, when constructed and fastened together substantially as and for the purposes specified.

2. The rollers C in a case for record-books for fire-proof purposes, made of wood, and covered with sheet metal, substantially as specified and shown.

S. H. HARRIS.

Witnesses:
L. L. COBURN.
J. L. COBURN.

(Here follows drawing marked page 258.)

259 UNITED STATES PATENT OFFICE.

JOHN L. BOONE, of San Francisco, California.

Improvement in Book-shelves.

Specification forming part of Letters Patent No. 182,157, dated September 12, 1876; application filed July 6, 1876.

To all whom it may concern:

Be it known that I, John L. Boone, of San Francisco city and county, State of California, have invented an improvement in book-shelves; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

My invention consists in attaching rollers to the front edges of book-shelves, so that when a book is withdrawn from or placed upon the shelf, it will move over the roller instead of over the edge of the shelf, as more fully explained below.

Referring to the accompanying drawing, figure 1 is a perspective view. Fig. 2 is a sectional view.

Let A represent a book-case or other series of shelves, for containing books. B B are the shelves, upon which the books are supported in a standing position.

The edges of book-shelves are ordinarily made sharp, so that a book which is frequently taken down from and replaced upon the shelves, soon becomes worn out, its lower edges being destroyed by the sharp corners of the shelves over which it is dragged, especially if the shelf upon which it is kept is higher than the level of the person's head who handles it, or if the books are very heavy—such as books of record and heavy account-books.

To obviate this difficulty I mount a roller, C, just in front of the edge of each shelf, so that the lower edges of the book will rest upon and roll over the roller, both when the books are being taken down from the shelf or placed upon it. This roller can be made of wood, metal, India-rubber, or other suitable material. I prefer to use wooden rollers and cover them with a thin layer of soft India-rubber or other soft elastic or yielding material.

Ordinary rubber tubing can be drawn over the wooden or other roller, and thus furnish a soft and yielding covering for the book to rest upon, and it will, owing to its yielding and adhesive nature, insure the rotation of the roller when the book is being moved over it, so that there will be no rubbing friction on the book-edge.

The rollers may be variously applied, but I provide any suitable metal bearings, which are fixed to the under side of the shelves so as to project out far enough to support the roller clear of the shelf-edge, and so that its upper edge is slightly above the level of the shelf-surface.

EXHIBIT.

M. P. WOLFE.

Book-Case.

No. 220,265. Patented Oct. 7, 1879.

Fig. 1.

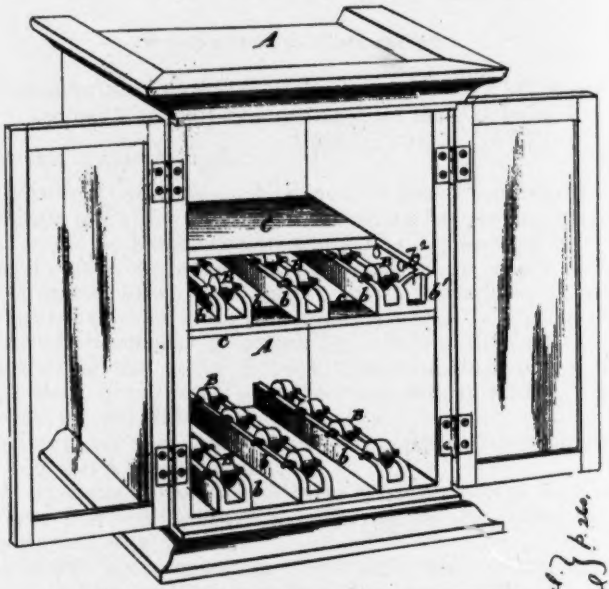
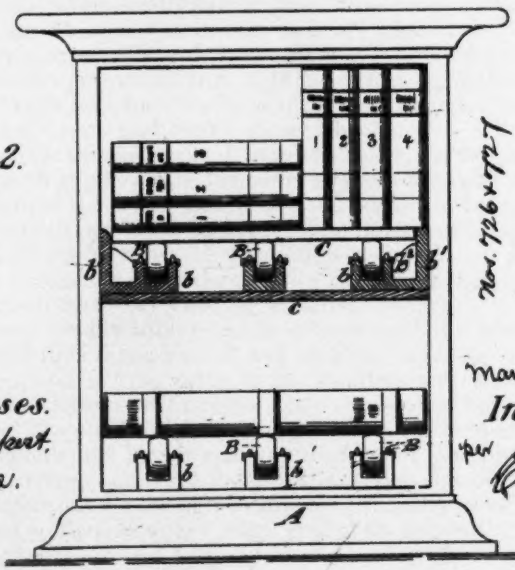


Fig. 2.



Nov. 726 × 727

Easton Metallic Mfg. Co. et al.
vs.
Office Specialty Mfg. Co. et al. } P. 20.

Witnesses.
A. Ruppert.
J. Hoenge.

Marion P. Wolfe
Inventor.
per Edson Bros.
Attorneys.

The shelf must be wide enough to support the books without allowing any of them to touch the roller, so that the roller can rotate freely.

I do not confine myself to any particular style of roller, nor to any particular arrangement for supporting the roller or applying it to the shelf-edge.

What I claim is—

A book-shelf, B, in combination with a roller, C, arranged along its front edge, as described, for the purpose set forth.

In witness whereof I have hereunto set my hand and seal.

JOHN L. BOONE. [L. S.]

Witnesses:

CHAS. G. PAGE.
ELWYN T. STACY.

(Here follows drawing marked page 260.)

261 UNITED STATES PATENT OFFICE.

MARION P. WOLFE, of Crawfordsville, Indiana.

Improvement in Book-cases.

Specification forming part of Letters Patent No. 220,265, dated October 7, 1879; application filed March 14, 1879.

To all whom it may concern:

Be it known that I, Marion P. Wolfe, of Crawfordsville, in the county of Montgomery and State of Indiana, have invented certain new and useful improvements in book or record cases; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved book or record case, and Fig. 2 is a detail perspective view of the same.

(Here follows drawing marked page 262.)

The same part in the two figures is denoted by the same letter.

The object of this invention is to provide means to hold heavy record-books and other tomes, which will lessen the labor and impairing of the books while handling them, and admit of their removal and replacement, so as to prevent wear and chafing of the books and the breaking away of the leaves from each other and the cover; and to these ends it consists of a bracket provided with a series of rolls hung in a box, having a right-angled plate united thereto by a web, substantially as hereinafter more fully set forth.

In the accompanying drawings, A refers to a suitable case for inclosing or receiving books. Fastened to the bottom of the case, and arranged about midway of its bottom and top, within the case, are boxes *b*, supplied with anti-friction rolls B, which provide resting-surfaces for the book or volumes. The boxes, arranged above the bottom and next to sides of case, are extended laterally, with said lateral extensions provided with upright side pieces, b^1, to form brackets to secure them, without other means of support, to the sides of the case. To strengthen the brackets, webs b^2 are used to connect them to the sides of the boxes, as clearly shown in the drawings. These boxes, with their rolls, may be duplicated when the books or volumes may not be of sufficient width or length to reach from and rest on the side series of rolls.

Wear, chafing, and other destructive effects to the books, besides the labor, &c., are greatly reduced by my improvements.

As a rule, I place the books in the case directly upon the rollers; but, if desired, a supplemental shelf, C, may be employed, itself resting upon the rollers.

EXHIBIT.

(No Model.)

W. N. CONANT.

ROLLER SHELF BOOK CASE.

No. 316,241. Patented Apr. 21, 1885.

Fig: 1

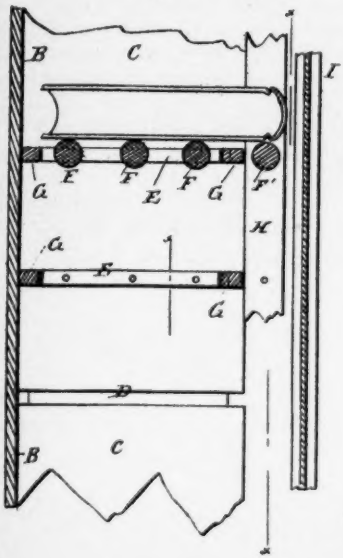


Fig: 2

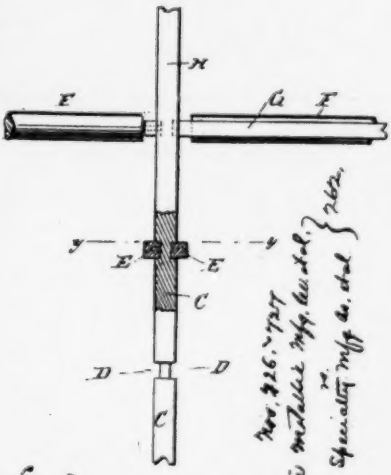
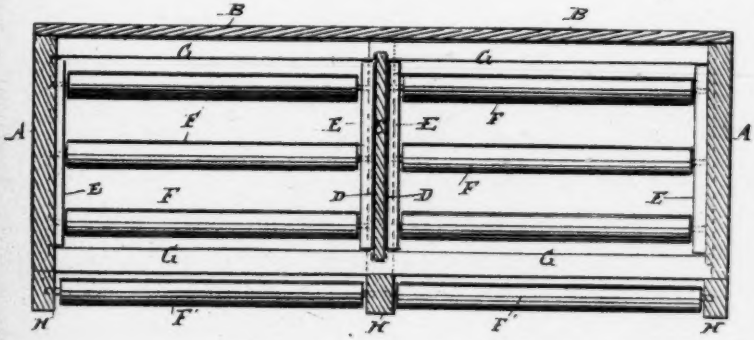


Fig: 3.



WITNESSES:

Chas. Neal

E. Sedgwick

INVENTOR:

W. N. Conant

BY Munn & Co

ATTORNEYS.

Cross-pieces or shelves *c* are used when, to prevent sagging, more than two sets of rolls are required above the lower shelf or bottom of the case. The cross-pieces may be attached either to the sides of the case or to the end frames or brackets which are so secured.

By sliding the books upon their sides into the case and upon the rollers, all the advantages hereinbefore referred to as to the saving of the books and lessening the labor in handling them are obtained.

Having thus fully described my invention, what I claim, and desire to secure by letters patent, is—

As a new article of manufacture, a bracket for book and other cases, having a series of rolls, B, hung in a box, *b*, having a right-angled plate, b^1, united thereto by a web, b^2, as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

MARION P. WOLFE.

Witnesses:
W. W. MORGAN.
PNO. J. JRICE.

263 UNITED STATES PATENT OFFICE.

WALTER N. CONANT, of Toledo, Ohio.

Roller-shelf Book-case.

Specification forming part of Letters Patent No. 316,241, dated April 21, 1885. Application filed February 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, Walter N. Conant, of Toledo, in the county of Lucas and State of Ohio, have invented a new and useful improvement in roller-shelf book-cases, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of a part of one of my improved roller-shelf book-cases. Fig. 2 is a front elevation of a part of the same, partly in section, through the broken line *x x x*, Fig. 1. Fig. 3 is a horizontal section of a part of the same, taken through the line *y y*, Fig. 2.

My invention relates to improvements in book-cases; and it consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

A represents the sides, and B the back, of a book-case. C are the vertical partitions that support the shelves. In the partitions C at each shelf are formed horizontal grooves D, in which are inserted cross-strips E, in which are formed bearings for the journals of the rollers F. The strips E hold the partitions C from warping. At the ends of the grooves D the partitions C are cut through to form recesses to receive the binding-bars G, the inner edges of which are recessed to form shoulders to fit into the end parts of the said grooves D, the recesses in the edges of the partitions C and binding-bars G being made of such a depth that the outer edges of the binding-bars will be flush with the edges of the partitions C.

To the forward edges of the partitions C and the front binding-bars, G, are attached vertical bars H, against which the doors I, when used, shut, and to which are pivoted the front rollers, F′. The rollers F F′ are made of a diameter a little greater than the thickness of the strips E and binding-bars G, so that the books while being put into and removed from the book-case will not come in contact with anything but the said rollers F F′, and will thus be prevented from being rubbed or marred by coming in contact with the stationary parts of the book-case.

Having thus described my invention, I claim as new and desire to secure by letters patent—

1. The combination, with the book-case frame A B, the rear rollers, F, and the vertical partitions C, having horizontal grooves D, of the

(No Model.) EXHIBIT. 2 Sheets—Sheet 1.

A. L. ADAMS.

ROLLER AND EXTENSION AXLE.

No. 338,459. Patented Mar. 23, 1886.

Nos. 726 & 727

Fenton Metallic Mfg. Co. et al. } p. 264
Office Specialty Mfg. Co. et al.

Fig. 1.

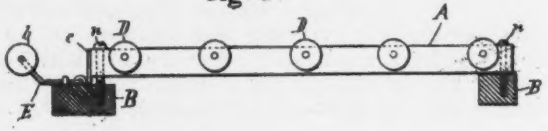
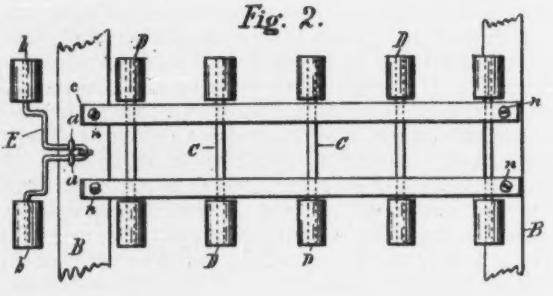


Fig. 2.



WITNESSES:
Jas. L. Ewbank
J. F. C. Smith

INVENTOR
A. Lemuel Adams.
BY
Francis C. Bowen
ATTORNEY

11305

EXHIBIT.

(No Model.) 2 Sheets—Sheet 2.

A. L. ADAMS.

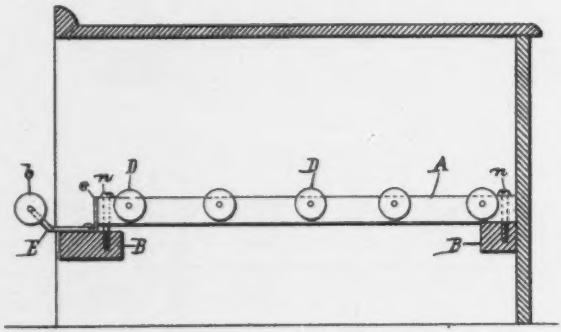
ROLLER AND EXTENSION AXLE.

No. 338,459. Patented Mar. 23, 1886.

Nos. 726-727

Peerless Metallic Mfg. Co. et al.
vs.
Office Specialty Mfg. Co. et al } D. 265

Fig. 3.



WITNESSES:

Sae S. Ewbank

D. P. Millet

INVENTOR

A. Lemuel Adams.

BY Francis C. Bacon

ATTORNEY

cross-strips E, substantially as herein shown and described, whereby the said partitions are held from warping, and a firm support is provided for the roller-journals, as set forth.

2. In a roller-shelf book-case, the combination, with the casing A B, the vertical partition C, having grooves D and edge recesses, the cross-strips E, the rollers F, and the recessed binding-bars G, of the vertical front bars, H, substantially as herein shown and described, whereby the book-case is strengthened, and a support is provided for the front rollers, as set forth.

3. The combination, with the casing A B, the back rollers, F, the horizontal binding-bars G, and the vertical front bars, H, of the rollers F′, substantially as herein shown and described, whereby the books are kept from contact with stationary parts of the book-case, as set forth.

WALTER N. CONANT.

Witnesses:
E. T. WAITE.
I. M. GLOYD.

(Here follow drawings marked pages 264 & 265.)

266 UNITED STATES PATENT OFFICE.

A. LEMUEL ADAMS, of New York, N. Y.

Roller and Extension Axle.

Specification forming part of Letters Patent No. 338,459, dated March 23, 1886. Application filed November 9, 1885. Serial No. 182,320. (No model.)

To all whom it may concern:

Be it known that I, A. Lemuel Adams, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful improvements in roller and extension axles, of which the following is a specification.

My invention relates to roller and extension axles for book-cases and other devices; and it consists in certain novel details of construction and operation, as hereinafter more particularly described, and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my invention. Fig. 2 is a top or plan view. Fig. 3 is a side view of my invention applied to a book-case.

Similar letters indicate similar parts.

The letter A designates bars of wood or iron, having their ends resting upon supports B B, so as to permit of their being moved laterally, and having their outer ends provided with a point, *c*, to retain them in position; or after the bars A A are adjusted to their proper position they may be secured by screws *n*. Intermediate of the ends of bars A A, I provide axles C C by passing them through openings in the bars, which axles have a diameter smaller than said openings, so that the axles will move freely therein, and so that the space between the bars may be increased or diminished, as may be desired, by moving the bars laterally on the axles. On the ends of the axles C C, I place rollers D D, which extend above the top of the bars A A, and which turn freely on their axles, as shown in Fig. 1.

On one of the supports is secured by means of fastenings *a a a a* a novel-shaped spring, E, which is first bent in the shape of a staple, then to the right and left, and then upward and outward, on the outer ends of which I provide rollers *b b*, as shown in Figs. 1 and 2, which spring by its peculiar construction assists in placing a book in its proper aperture. The spring E may be extended or contracted to correspond with the width of the position.

A series of my improvements may be constructed side by side with divisions between them, forming pigeon-holes, like a book-case, which holes may be of any suitable size.

The operation of my invention is as follows: When a book is to be placed in position, it is first rested on the spring-rollers *b b* of the spring E, which by its own inherent elasticity assists in forcing

EXHIBIT.

(No Model.)

H. J. HOFFMAN.

STORAGE CASE FOR BOOKS, &c.

No. 437,833. Patented Oct. 7, 1890.

Fig. 1.

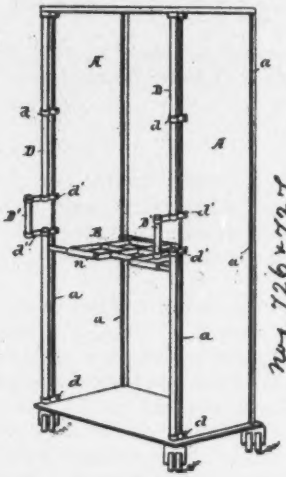


Fig. 2.

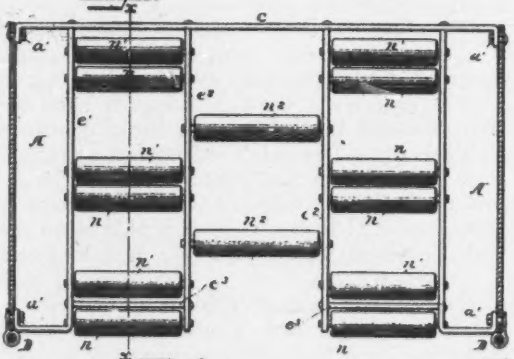


Fig. 4.

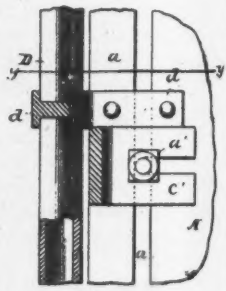


Fig. 3.

Fig. 5.

Witnesses
Jno. G. Hinkel
W. S. McArthur

Inventor
Horace J. Hoffman
By his Attorneys
Foster & Freeman

the book onto the rollers D D, when the book is easily passed by means of said rollers D D to its proper place.

The spring E is an important feature of my invention, as it may be applied to the lids of match, tobacco, and other boxes to open them, and for other purposes.

What I claim as new, and desire to secure by letters patent, is—

1. A book-rack consisting of the bars A, axles C, rollers D, and spring E, substantially as herein shown and described.

2. A spring, E, bent in the shape of a staple, then to the right and left, then upward and outward, with or without rollers on its outer ends, substantially as shown and described.

3. In combination with a book-rack, the spring E and its rollers *b*, substantially as and for the purpose described.

4. A book rack consisting of the bars A, axles C, rollers D, spring E, and rollers *b*, substantially as and for the purpose described.

Signed at New York, in the county of New York and State of New York, this 6th day of November, A. D. 1885.

A. LEMUEL ADAMS.

Witnesses:
JAS. S. EWBANK.
FRANCIS C. BOWEN.

(Here follows drawing marked page 267.)

268 UNITED STATES PATENT OFFICE.

HORACE J. HOFFMAN, of Chicago, Illinois, assignor, by mesne assignments, to the Fenton Metallic Manufacturing Company, of New York.

Storage-case for Books, &c.

Specification forming part of Letters Patent No. 437,833, dated October 7, 1890. Application filed April 19, 1890. Serial No. 348,629. (No model.)

To all whom it may concern:

Be it known that I, Horace J. Hoffman, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in storage-cases for books, &c., of which the following is a specification.

The object of my invention is to facilitate the handling and prevent the abrasion and injury of heavy books, &c.

It consists, essentially, of the peculiar arrangement of the guiding and supporting rollers and of the peculiarities in the construction of the case and shelves, hereinafter specifically set forth.

In the accompanying drawings like letters designate the same parts in the several figures.

Figure 1 is a perspective view of a cabinet or case embodying my improvements. Fig. 2 is a plan view, on an enlarged scale, of one of the shelves or book-supporting racks. Fig. 3 is a vertical cross-section of the same on the line $x\,x$, Fig. 2. Fig. 4 is a sectional detail of one of the upright guide-roll bearings, showing also the method of securing the book shelves or racks in the case; and Fig. 5 is a horizontal section taken on the line $y\,y$, Fig. 4.

A represents the cabinet or case, which may be either fixed or movable, and may be made of any suitable material, but is preferably formed of heavy sheet-iron, with or without a back, as desired.

B is one of the book-supporting shelves or racks composed of a metallic frame, in which are mounted rollers for guiding and supporting the books, &c. This metallic frame is preferably formed of heavy band-iron in sections c, c' c', c^2 c^2, and c^3 c^3.

The section c, forming the back of the rack, extends from side to side of the case A and is bent forward at each end at right angles and perforated or notched, as shown in Fig. 4, to receive the bolts a' a', by which the rack is secured at the rear to said case.

The two sections c' c' are attached to the section c, a short distance inside of the ends thereof, extend from the back to the front of the case, and are bent outward at right angles to meet the sides of the case, and again back at right angles at their ends, which are perforated or notched, as seen in Fig. 4, to receive the bolts a' a', supporting the frame at the front and securing the same to the sides of said case.

The sections e^2 e^2 are arranged parallel with and between the sections e' e' and extend from the section c, to which they are attached, to the front of the shelf. Cross-sections e^3 e^3, parallel with and a little to the rear of the front of the roller-frame, connect and brace the sections e' e' and e^2 e^2.

Rollers n' n', made of iron, wood, or any suitable material, are mounted, as shown in Fig. 2, in pairs parallel with the front and rear edges of the rack B, between the sections e' e' and e^2 e^2, which are perforated and furnish bearings for the journals of said rollers. One of each pair of said rollers, preferably the front one n, is set above the other and projects above the roller-frame, as seen in Fig. 2, so as to support a book out of contact with said frame. The rear roller n' n' of each pair is made to project below the roller-frame and thus prevent the book on the rack next below when tilted in removing or inserting the same in the case from rubbing against said frame. By thus arranging one set of rollers below the other each set operates independently, and when a book is resting upon the roller n n, and a book being placed upon or removed from the shelf or rack next below engages any of the rollers n' n' they will turn freely without effect upon the book resting above on the rollers n n.

If desired, rollers n^2 n^2 may be placed between the side sections e^2 e^3 of the roller-frame on a level with the rollers n n to prevent the book from sagging at the center. For supporting all ordinary sizes of books, however, the rollers n n, if properly disposed, are sufficient without the rollers n^2 n^2.

The front rollers n n are set, as seen in Figs. 2 and 3, in front of the cross-sections e^3 e^3 of the roller-frame, and project slightly in front of and above said frame, so as to prevent contact between said frame and a book whenever the latter is inserted in or removed from the case A at any inclination to the racks B.

At the ends of the racks B, just in advance of the sides of case A and projecting a little inside of the same, I provide the
269 upright rollers D D, which may be supported in different ways, but, as shown, are journaled in brackets d d, secured to the sides of said case A, as seen in Figs. 4 and 5.

For convenience in moving the case two upright rollers D' D' may be set in advance of the rollers D D in extensions d' d' of the brackets supporting the adjacent ends of said rollers D D, as shown in Fig. 1.

Without limiting myself to the precise construction and arrangements of parts shown, I claim—

1. In a stor-ge-case for books, &c., a supporting-rack composed of a roller-frame or shelf and two sets of rollers journaled therein, one set projecting above and one below the other, substantially as set forth.

2. In a storage-case for books, &c., the combination of supporting racks or shelves and upright rollers supported adjacent to the ends of said racks or shelves, substantially as described.

3. The combination of a portable storage-case provided with casters, horizontal supporting racks or shelves, and upright rollers

forming handles for moving said case and arranged to prevent a book or the like on the adjacent shelf or shelves from rubbing against the sides of said case, substantially as set forth.

4. In a storage-case for books, &c., the combination of a portable cabinet or case, vertically-adjustable shelves or racks, horizontal rollers journaled in said shelves or racks, and upright rollers supported in suitable bearings adjacent to the ends of the said shelves or racks, substantially as set forth.

5. In a storage-case for books, &c., a supporting rack, frame, or shelf supporting a plurality of rollers projecting above its upper surface, and also a roller projecting below the lower surface of the first-named rollers, substantially as described.

6. The combination, with a case provided with horizontal rollers and supports therefor, of upright rollers arranged adjacent to the ends of the horizontal rollers, and supports for said upright rollers, substantially as described.

7. The combination of a shelf or rack with the parallel horizontal rollers journaled therein, and the vertical rollers arranged adjacent to the sides thereof, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORACE J. HOFFMAN.

Witnesses:
EMMA HOFFMAN.
GLADYS CRANDALL.

(Here follows drawing marked page 270.)

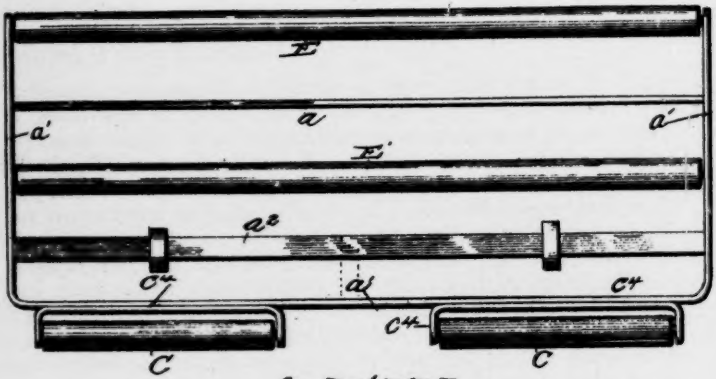
(No Model.)

EXHIBIT.

M. R. JEWELL & P. H. YAWMAN.

ROLLER BOOK SHELF.

No. 557,392. Patented Mar. 31, 1896.



Nos. 726 & 727

Fuston Metallic Mfg. Co. et al
vs.
Office Specialty Mfg. Co. et al
} p 270

Witnesses:
L. C. Hills
F. L. Ehmon

Inventors:
M. R. Jewell
P. H. Yawman
By Philip T. Dodge Attorney

271 UNITED STATES PATENT OFFICE.

MAJOR ROMEYN JEWELL and PHILIP H. YAWMAN, of Rochester, New York, assignors to the Office Specialty Manufacturing Company, of same place.

Roller Book-shelf.

Specification forming part of Letters Patent No. 557,392, dated March 31, 1896. Application filed December 5, 1891. Serial No. 414,104. (No model.)

To all whom it may concern:

Be it known that we, Major Romeyn Jewell and Philip H. Yawman, of Rochester, in the county of Monroe and State of New York, have invented certain improvements in roller book-shelves, of which the following is a specification.

Our present invention has for its object to provide as a new article of manufacture a portable roller book-shelf—that is, a book-shelf which may be handled as an entirety and easily constructed, which shall possess strength, and be adapted to permit the ready application and removal of heavy books. To this end we construct our shelf with a strong self-sustaining metal frame, having therein one or more horizontal rear rolls, and also having at the front a strong cross-bar extending continuously from one end to the other with two short exposed rolls supported in brackets secured to the front cross-bar.

In the drawing the figure represents a plan view of a shelf constructed in accordance with our invention.

This shelf is, in the present embodiment of our invention, composed of a bar a' of iron or steel, the ends being bent back and connected by one or more suitable longitudinal strips or bars a and a^2, extending parallel with the front portion of bar a', these parts constituting a rigid frame.

E E′ indicate rollers journaled at the ends in the end pieces of the frame, so as to turn freely, and these rollers are adapted to support the books when laid on their sides upon said rollers.

Attached to the front of the front side of the bar a' are two U-shaped brackets C^4 having in their outwardly-extending ends short rollers C, the aggregate length of which is less than the length of the front bar, and said brackets and rollers are so positioned upon the front bar a' as to leave a space or hand-hole between them, so that when a book rests upon the supporting-rollers on its side, its back projecting over the two short rolls C C, the operator may readily grasp said book and remove it.

The location of the rolls C C forward of the front bar effectually prevents the marring of the covering of the book when it is applied to the shelf, and particularly is this the case when the shelf is supported at an elevation and the operator is obliged to reach up to insert the book.

These shelves may be applied to any suitable frame or case, being of course supported at the ends, and the brackets containing the rollers being each complete may be applied at such distances apart on the front bar as will form the proper hand-hole or space between them to enable the book to be readily grasped and manipulated.

It is not essential that the precise form of the frame shown be employed as long as the roller-brackets are separate structures and may be applied to the front side of the front bar.

We claim as our invention—

As a new article of manufacture a portable book-shelf, consisting of a rigid frame having one or more rear rollers and a continuous bar across the front, from end to end, the U-shaped brackets containing rollers and attached to the front of said front bar, the said brackets being separated to permit the introduction of the hand between them.

In testimony whereof we hereunto set our hands this 1st day of October, 1890, in the presence of two attesting witnesses.

MAJOR ROMEYN JEWELL.
PHILIP H. YAWMAN.

Witnesses:
ALBRECHT BUEDINGEN.
LIBBIE A. WEBER.

272 *Interlocutory Decree Granting Injunction and Referring Cause to Auditor.*

Filed June 3, 1893.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING COMPANY.
} Equity. No. 13793.

This cause coming on to be heard on the motion to amend the final decree passed herein on this eleventh day of May, 1893, and having been considered by the court, it is, upon consideration thereof, this third day of June, 1893, ordered, adjudged, and decreed that the said decree be, and the same is hereby, set aside and vacated and the following decree passed in lieu thereof, to wit:

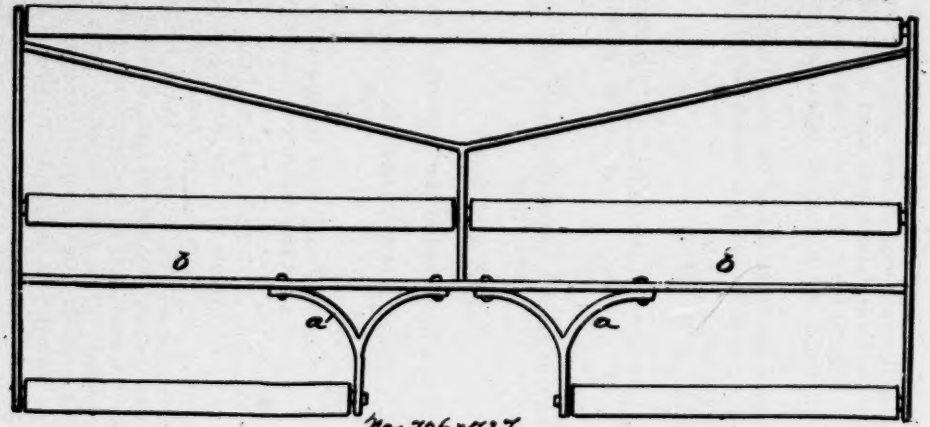
This cause came on to be heard at this term on pleadings and proofs and was argued by counsel, and thereupon, upon consideration thereof, it is ordered, adjudged, and decreed as follows, viz:

That letters patent upon which this suit is brought, to wit, letters patent granted to the plaintiff for improvements in storage cases and numbered 450,124, dated April 17th, 1891, are good and valid in law.

That Horace J. L[illegible]ffman was the original and first inventor of the invention described and claimed in said letters patent; that the title

Supreme Court D.C.
Penton Metallic Mfg Co
Charles E Burkhart
vs
The Office Specialty Mfg Co
In Equity

Complainants Exhibit
Hanemann Sketch
C.E.B.
No.



Nos. 726 & 727
Penton Metallic Mfg. Co. et al
vs.
Office Specialty Mfg. Co. et al
} No. 275

TESTIMONY, &c., TAKEN BEFORE AUDITOR.
Filed January 15, 1897.

thereto and to the invention described and claimed therein
273 is vested in the plaintiff, and the defendants have infringed the said letters patent and the exclusive right of plaintiff thereunder by using and vending within the District of Columbia roller shelves made as illustrated by Fig. 17 of Complainant's Exhibit Office Specialty Manufacturing Co. Catalogue, and also as illustrated by Complainant's Exhibit Hausman's Sketch and cases containing roller shelves embodying the improvements specified in said letters patent particularly claimed in claims one and two thereof.

And it is further ordered, adjudged, and decreed that plaintiff do recover from the defendants the profits, gains, and advantages which said defendants have received or made or what have arisen or accrued to them by reason of any infringement by said defendants of the said first and second claims of said letters patent No. 450,124 since the date of said letters patent, and also the damages which the plaintiff has sustained by reason of said infringement, to be assessed as provided by statute.

And it is further ordered, adjudged, and decreed that it be referred to the auditor of this court to ascertain, take, state, and report an account of the gains, profits, and advantages which said defendants have received or which have arisen or accrued to them or either of them from the manufacture, use, or sale of shelves or cases containing shelves embodying the improvements described and claimed in claims 1 and 2 of said letters patent No. 450,124, and also to assess the damages suffered by the plaintiff herein by reason of said infringement.

And it is further ordered, adjudged, and decreed *the* the plaintiff on such accounting have the right to cause an examination
274 of said defendants *ore tenus* or otherwise, and also the production of the books, vouchers, and documents of said defendants, and that the said defendants attend for such purpose before said auditor from time to time as said auditor shall direct.

And it is further ordered, adjudged, and decreed that a perpetual injunction issue in this suit against these defendants, Charles E. Birckhead and The Office Specialty Manufacturing Company, their servants, attorneys, workmen, employees, and representatives, and each of them, perpetually enjoining and restraining them from directly or indirectly constructing, using, or vending or offering for sale any shelf or any case containing any shelf embodying the improvements specified in said claims one and two of said letters patent or in any way counterfeiting or imitating said patented invention or improvements set forth in said claims one and two or in anywise infringing the rights of plaintiff or causing the same to be done under said claims one and two of said letters patent No. 450,124.

And it is further ordered, adjudged, and decreed that plaintiff do recover of the defendants its costs, charges, and disbursements in this suit, to be taxed by the clerk of this court.

E. F. BINGHAM, *C. J.*

(Here follows drawing marked page 275.)

276 FENTON METALLIC MFG. CO. vs. BIRKHEAD.

WEDNESDAY, *July* 5, 1893—10.30 a. m.

Hearing pursuant to notice.

Present: Mr. Foster, for the complainant, and Mr. Church, for the defendant.

The decree and order of reference being read and discussed, it was agreed that the defendant should present an account to be submitted for the inspection of the complainant's counsel, and as a basis for such other and further examination and proceedings as may be found necessary for the purpose of allowing time for the preparation of such an account the reference is continued until Monday, the 17th instant, at 10 o'clock a. m.

277 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO. vs. CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO. No. 13793, Eq. Dock. 33.

This cause being set for hearing under the decree of reference passed on the 3rd of June, 1893, and pursuant to adjournment on the 5th of July, 1893, to this day for the purpose of allowing time to the defendant to prepare and file an account as required by the said decree of June 3rd, it is this 17th day of July, 1893, directed that the defendants on or before the 15th day of September, 1893, file in this office and present to the complainant's counsel for inspection an account of all profits, gains, and advantages which the said defendants respectively have received or made or which have arisen or accrued to them respectively by reason of any infringement by them or either of them of the said first and second claims of said letters patent number 450,124 since the date of said letters patent; the said account to be subject to such exception and surcharge as may be proper, and the cause under the order of reference to be thereafter continued here for such further examination and proceedings as may be found necessary.

JAS. G. PAYNE, *Auditor.*

278 FENTON METALLIC MANUFACTURING CO. vs. BIRKHEAD.

SEPTEMBER 15, 1893.

Mr. Church, of counsel for the defendant, files in this office a statement and account in response to the direction passed in this proceeding on the 17th of July, 1893, a copy of the same having been delivered to the office of the plaintiff's solicitor.

279 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO.
No. 13793, Equity Docket 33.

The plaintiffs having filed exceptions to the account filed by the defendants on the 15th of September, 1893, with a motion for an order upon the defendants to present a further statement as specified in the said exceptions and motion filed on the 15th of November, 1893, and the counsel for the plaintiffs and defendants being heard on the said exceptions and motion, it is this 27th day of November, 1893, ordered that the defendants produce on the 18th of December, 1893, at 12 o'clock m., all books, accounts, and records relating to the manufacture, use, or sale of shelves or cases containing shelves embodying the improvements described and claimed in claims 1 and 2 of the letters patent referred to in the decree of June 3, 1893, and that they appear in person or by the proper officers of the said defendant corporation or the person in charge of said manufacture, use, or sale or of the said books, accounts, and records for examination in this proceeding.

JAS. G. PAYNE, *Auditor.*

DECEMBER 18, 1893.

By agreement of the parties the hearing assigned for this date is continued until Wednesday, December 20, 1893, at 10 o'clock a. m.

280 DECEMBER 20, 1893.

Hearing pursuant to adjournment.

Present: Mr. Foster, for the complainant; Mr. Church, for the defendant-.

Mr. Church, counsel for the defendants, states that he has heretofore filed with the auditor a statement made under the direction of Mr. Carl F. Lomb, treasurer and general manager of the defendant corporation, The Office Specialty Manufacturing Company, purporting to be an estimate of the number of shelves made and sold for the corporation, called for in the decree of the court in this cause, together with a statement of the estimated cost of said shelves, the estimated prices at which said shelves were sold, and the estimated net profit made upon said shelves after deducting the cost and estimated amount of reasonable expenses of selling; that said statement so made was and is believed to be as near an approximation of the facts of the case as can possibly be made, but, nevertheless, is based largely upon conjecture and guesswork and does not purport to be an absolutely correct account of the actual transactions of the defendant corporation in respect to said shelves; that this statement was made in the hope that it would be accepted by the complainant, and that it might be stipulated into the case as a substantially accurate account upon which the auditor might base his report; that inasmuch, however, as the complainant has not seen

fit to accept said statement counsel for the defendant- hereby requests leave to withdraw the statement and requests that the auditor ignore it as either an admission or as evidence or in any manner figuring in the further proceedings which may be had in this cause, and

281 counsel for defendants hereby notifies counsel for complainant that the latter must go into accounting at his peril, and that due and proper objection will be made to any estimates or guesses that may be made by any witness produced before the auditor in his behalf.

Counsel for complainant objects to the statement and the request made by counsel for defendants, first, as contradictory of the statements already made and deliberately put upon file in this cause, and, second, because he has a right to consider and to cross-examine the witness upon any statement or paper now on file and produced on behalf of defendants, and he asks the auditor so to rule preliminary to any attempt at examination of the witness.

The auditor for the present holds that the paper referred to by counsel for the defendants, filed on the 15th of September last, cannot be withdrawn. He further rules that it may be made use of by counsel for complainants in the examination of witnesses produced by the defendants as a statement or pleading filed in the cause by the defendants.

Mr. Church, counsel for defendants, notes an exception to the ruling of the auditor and objects to said ruling upon the ground that the paper referred to can neither be regarded as an admission nor as evidence in this case, because it has not the characteristics of either.

282 CARL F. LOMB, having first been duly sworn, testifies as follows:

The witness produced on behalf of defendants is cross-examined by counsel for complainants in accordance with his production under the order of the auditor.

By Mr. FOSTER:

Q. What is your name, age, residence, and occupation?

A. Carl F. Lomb; Rochester, N. Y.; 39 years; general manager and treasurer of the Office Specialty Manufacturing Company.

Q. When was that company organized?

A. In 1889.

Q. How long have you been connected with the Office Specialty Manufacturing Co.?

A. Since its organization, in 1889.

Q. And what has been your position or positions during that time?

A. I have been connected with the company since its organization, in 1889, and I have been treasurer and general manager since then.

Q. What, if any, connection have you had with the keeping of the books and records of that company?

A. I have had general supervision of the books.

Q. Have you been familiar with the various entries that have been made in the said books from time to time, and have they been made at your direction and under your supervision?

A. I have been familiar with — know how entries are made. They have been made under my supervision and direction, at least to that extent that they were to be entered, and from all that I have noticed they were so entered.

283 Q. Can you state of your own knowledge that the entries in any of the books that may be produced at this accounting are true and correct?

A. Well, as far as I know. I certainly cannot account for any omissions that may have been made, but I know this, that every entry must appear on the books.

Counsel for complainant, in view of the statements of the witness that he does not have personal knowledge of the correctness of the entries made in the books which may be produced, hereby gives notice that he reserves the right, if it should appear to be necessary, to call for the production of such witnesses as actually made any entries in such books.

Q. There was a statement of account filed in this case dated September 15, 1893, in pursuance to an order of the auditor and on behalf of the Office Specialty Manufacturing Company. Did you ever personally see that statement? I present you with that statement and ask you whether or not you ever saw that statement before.

A. Yes, sir.

Q. State whether you had any personal part in preparing that statement; if so, what.

A. I had our help at the office in Rochester, also the different managers of our different branch offices, look up the sales of shelves, note them down, and compare part of them with the books; part of them was guesswork on my part, as near as I was able to get it from a personal knowledge of the business.

Q. And you furnished your attorneys with the figures and memoranda contained in this statement?

A. Yes, sir.

284 Q. And to the best of your knowledge and belief these figures and memoranda so furnished are correct?

A. I furnished these figures to our attorneys, and to the best of my knowledge and belief they are correct.

Q. Give me the names of the help and managers referred to in answer to the preceeding question?

A. Charles Amsler, clerk, Rochester; Miss Maud Fiske, bookkeeper, Rochester. In sending to our different offices for the reports, certainly I do not know who made them out, but I can give you the names of the managers:

O. J. Ramstell, manager, New York.

S. E. Watson, manager, Chicago, Ill.

Charles Slemin, Jr., manager, San Francisco, Cal.

E. H. Morrison, Washington, D. C.

Q. Have you given me the names of all the managers or agents through whom roller shelves or roller shelves and cases are sold on behalf of your company outside of Rochester?

A. Yes, sir.

Q. State where the roller shelves that are sold by the Office Specialty Manufacturing Company are manufactured.

A. They are manufactured at Rochester, N. Y.

Q. Have all the roller shelves and cases containing roller shelves that have been made for or by and sold by the Office Specialty Manufacturing Co. since April 7, 1891, been manufactured in Rochester?

A. Yes, sir.

Q. Have they always been manufactured by the same parties and at the same place in Rochester?

A. They have been.

Q. Give the name of the party or parties who have so manufactured said shelves and cases.

285 A. Yawman & Erbe.

Q. Have you had a regular book account with Yawman & Erbe showing the number, sizes, and character of roller shelves, and also of cases containing roller shelves, made by them and furnished to your company and the amounts paid therefor?

A. We have a book account; it does not show, however, the number of shelves or shelves in cases, as the book will show simple the total amount of goods charged to us at the end of the month.

Q. Do you mean to say that in rendering their account to you Yawman & Erbe did not render it in any specified form, so that you can know the various item- that go to make up that account?

A. We have all the bills itemized in our possession in which the number of shelves or shelves in cases are stated, and the prices of many are attached in detail.

—. I request you to produce such books as you have showing your accounts with Yawman & Erbe since April 7, 1891, and also their itemized bills from that date.

—. We have produced ledger No. 1, Office Specialty Manufacturing Company, and refer to the account with Yawman & Erbe, beginning on page 504.

Q. Referring to the account in ledger No. 1, I notice that certain charges are made against the Chicago branch and the Philadelphia branch. State whether or not Yawman & Erbe forwarded any roller shelves or any roller shelves in cases to your branch offices without rendering an itemized account to your main office.

286 A. Yawman & Erbe do not manufacture any shelves or other articles for any of our branch offices except they come through our home office, and the account is rendered to us.

Q. Will you produce these itemized bills?

A. Yes, sir.

Witness also produces file No. 107 of itemized bills, indorsed from "March 1, '91, to September, '91," Yawman & Erbe paid bills.

Q. State whether in making up the account heretofore filed in this cause you referred to these itemized bills of Yawman & Erbe.

A. We did not.

Q. State, then, in what manner you fixed the number of shelves manufactured for your company at a total of 24,498.

A. I had it made up from our sales books in Rochester and the different branches.

Q. Please state how in these bills shelves like exhibit which has been sketched are designated.

A. They are called No. 4.

Q. State how in the bills shelves, figure 17, Office Specialty Manufacturing Company's catalogue, are designated.

A. Those are also designated as No. 4.

Q. Please state whether in these bills any reference is made to shelves having continuous rollers from end to end—that is, where there are no short rollers at the front; and, if so, how they are designated.

A. They are designated as No. 3.

Q. Please state whether any of these bills refer to any other form of roller shelves having two short rollers at the front except those designated as No. 4.

A. No; I think not.

287 Q. Do you or have you manufactured any other form of roller shelves, except those designated in the bills as No. 4, having two short rollers at the front?

A. During the time between April 7, 1891, and June 3, 1893, we have not manufactured any with short front rollers.

Q. Since June 3, 1893, have you manufactured any with short front rollers?

A. Yes, sir.

Q. Were they made by Yawman & Erbe?

A. Yes, sir.

Q. How are such rollers designated in the bills?

A. As No. 4.

The witness is requested to produce before the auditor one of the shelves which it is admitted the Office Specialty Manufacturing Company has made since June 3, 1893, and having two short rollers at the front.

Witness states he will produce such.

Q. Am I to understand that the Office Specialty Manufacturing Company has made no other forms of roller shelves having two short rollers at the front except the one last referred to as made since June, 1893, and the shelves like Exhibits Hansmann Sketch and those like figure 17 of the Office Specialty Manufacturing Company's catalogue?

A. We have not to my personal knowledge and belief.

Q. And would your answer be the same to the question as to whether any other forms have been made for the Office Specialty Manufacturing Company by other companies?

A. Yes, sir.

Q. In a statement filed by the defendant- in this case, wherein it is set forth that a total of 24,498 shelves has been made, are
288 the shelves included that you referred to in one of your previous answers as having been made with front *front* rollers since June, 1893?

A. They are not.

Q. Have you with you any book or account that will show the number of such other shelves made since June, 1893, with two front rollers?

A. No, sir.

Counsel for complainants gives notice that he will require the production of evidence as to the number of such shelves manufactured and sold by or on behalf of the defendants.

Q. Please give the names of parties to whom were sold the shelves which go to make up the total of 24,498 referred to in statement filed on behalf of the defendant- in this case.

Witness produces a series of memoranda, and the same are offered in evidence by counsel for complainant, with the request that they may be marked as Exhibit Memorandum No. 1.

Q. State how these memoranda were made up.

A. They were taken from the sales books.

Q. In Rochester, I suppose?

A. Part in Rochester, Chicago, New York city, and other places.

Q. I notice that in memorandum No. 1 there is a report in ink of the Chicago branch from April 7, 1891, to May 11, 1893, and also a pencil memorandum of the Chicago branch of same dates. Are these intended to be duplicates or do they represent independent matters?

A. They are duplicates.

Q. State whether, to the best of your knowledge and belief, the memoranda No. 1 set forth all of the shelves like Exhibits Hansmann Sketch or figure 17, Office Specialty Manufacturing
289 Company catalogue, that have been sold by the Office Specialty Manufacturing Company between April 7, 1891, and June 3, 1893.

A. Yes, sir.

Q. State whether the items given in the various papers constituting memorandum No. 1 are, to the best of your knowledge and belief, correct statements of the actual sizes, numbers, prices, and parties to whom the goods were sold or sent.

A. I cannot say that they are absolutely correct as to prices. Some of the prices are mere guesses, and in cases of this kind they have been taken at maximum prices at which others have been sold.

Q. Examine Exhibit Memorandum No. 1 and state which of the prices therein indicated are mere guess, marking a X opposite each in the price column.

Hands witness Exhibit Memorandum No. 1.

A. It is impossible for me to state. From actual examination of the books, however, I notice the two first items are guess.

Q. Do you know of any other items of prices in that memorandum that are guessed at and not the actual prices received?

A. I would refer to the items there for George Richter & Co.; the shelves were not sold at regular prices, or I might say at stipulated prices. In drawing up these statements we took the number of shelves in all the jobs at cost price and added the percentage at which we sell to those parties.

Q. What is the percentage added to the cost price at which you sell to Geo. H. Richter & Co.?

290 A. Thirty-three and a third per cent.

Q. Who is George H. Richter & Co.?

A. Geo. H. Richter & Co. is a commission firm for the New England States handling all our goods.

Q. And the prices given in the registry section of Exhibit Memorandum No. 1 under the charge against Geo. H. Richter & Co. are the prices at which the goods were furnished to him?

A. Yes, sir.

Q. They are not the prices at which the goods were sold to others?

A. No, sir.

Q. Have you any knowledge of the advance at which the goods were sold to others by Richter & Co., or was there any understanding between your company and Geo. H. Richter & Co. as to the additional price he was to charge in selling such goods to others?

A. I have no knowledge of the prices at which Geo. H. Richter & Co. sold these goods. There was in some cases an understanding at which he should sell.

Q. What was that understanding?

A. In was in cases of competition with certain parties only. At other times he was at liberty to sell at whatever prices he wanted to.

Q. Was one of these parties the Fenton Metallic Manufacturing Company of New York?

A. Yes; but only when he came in actual competition with them.

Q. Except in the items which appear as charges against Geo. H. Richter & Co., do the other charges in Exhibit Memorandum

291 No. 1 specify the exact amounts received upon the respective sales?

A. Yes; to the best of my knowledge.

Q. Is there any one else who can testify more accurately or with a better knowledge or more definitely than yourself upon these points that I may inquire about?

A. No, sir.

Q. In the statement filed on behalf of the Office Specialty Manufacturing Co. as to the cost of production of the shelves referred to in said statement it is stated that it varied from 88 cts. to $1.67 per shelf. What was the cause of that variation in prices—the size or the finish, or both?

A. I think the size had more to do with the difference in prices than anything else.

Q. The main factor in variation in size was the difference in the length, I understand?

A. Length, depth, etc., of the cases and the shelf adapted for them.

Q. I notice in Exhibit Memorandum No. 1—referring, for instance, to the New York section of said memorandum—that one column is marked "Prices received for shelves" and another column is marked "Contract price." Am I to understand from that that the first column indicates the amounts that have been paid upon account of the contract price?

A. No, sir. It means in this particular case that besides the roller shelves a number of document files, with other articles, were furnished with this particular job.

Q. Then I understand that the last column, "Contract price," is the contract price of each job, and that you have indicated the number of roller shelves in each separate job and the price
292 that was paid for the shelves in that job, and that this latter price is what is under the heading "Prices received." Am I right?

A. Yes, sir. I might state here that some of the prices mentioned in prices received for shelves is guesswork.

Q. I understand, however, that in guessing at said prices you have stated, as nearly as you can from all the information you have received, what the actual amount received was in each case; is that so?

A. As near as I can say, yes. We have taken the maximum selling prices in most all of the cases.

Q. Do you mean maximum selling price to the public or to your agents?

A. To the public.

Q. Am I right in understanding that in a great majority of the sales of shelves indicated in your memorandum and in the statement filed on behalf of the Office Specialty Manufacturing Co. that the shelves were sold in connection with cases which supported them?

A. Yes; I think, from knowledge of the business, that 95 per cent. of all shelves sold were sold in cases.

Q. Assuming that you sold, say, 150 shelves, with the inclosing case or cases, about what proportion of the total amount received would be for the cases alone?

A. I cannot tell what the proportionate cost would be.

Q. State whether or not any large number of roller shelves or cases containing roller shelves of the character in the suit have been sold in public competition with the Fenton Metallic Manufacturing Co. where each of the parties had to deposit bids.

A. We have met these people in competition many a time and naturally had to make bids for the work.

293 Q. And in some instances the bids were awarded to you?

A. Yes, sir; in many instances.

Q. In such cases were your prices reduced beyond the normal prices usually charged?

A. In some cases they were and in some they were not.

Q. Please state, as nearly as you can as the result of your investigations, whether the gross expense of manufacturing roller shelving bear the same proportion to the gross receipts as the other articles manufactured by your company do.

A. Well, I fully believe that the majority of our goods which we manufacture cost us, in proportion to their selling prices, less than the cost of rolling shelving compared with the selling prices.

Q. Have you any means of distinguishing the difference in the relative costs?

A. I have not.

Q. In the statement filed on behalf of the defendant company September 15, 1893, the gross receipts of your company between the date of the present suit and the date of the decree was $900,247.38 and the estimated gross expenses $345,471.87; state whether, to the best of your knowledge and belief, these figures are correct.

A. They are correct according to my best knowledge and belief.

Adjourned until January 16, 1894, at 10 o'clock a. m.

294 FENTON METALLIC MFG. CO. *vs.* BIRCKHEAD.

JANUARY 16, 1894.

Hearing pursuant to adjournment.

Present: Mr. Foster, for the complainant, and Mr. Church, for the defendant-.

Mr. Church, counsel for the defendant-, states that it appears from the record furnished by the stenographer of the proceedings at the last hearing that the witness Carl F. Lomb was produced on behalf of the defendants and was cross-examined by counsel for complainants. While it may be true that counsel for complainants will have the right to cross-examine the defendants whenever and however they should appear as witnesses in this cause, counsel for defendants deems it proper to state that this particular witness, if he is before the auditor at all, is before him as a witness for the complainants; that it is true the witness was brought here to Washington at the request of counsel for defendants, but that did not require counsel for defendants to put him upon the stand. If counsel for complainants were minded to put him upon the stand, the record should so show; it should appear he was brought here to testify in this accounting in behalf of the complainants.

Mr. Foster, counsel for complainants, replies that the witness is here upon the tender made by the defendants in the statement filed by them September 15 and upon the order of the auditor and is examined by him as an adverse witness, and he cannot accede to the position taken by counsel for defendants.

295 Examination of Mr. LOMB resumed.

By Mr. FOSTER:

Q. At the preceding examination you were requested to produce before the auditor one of the shelves made since June 3, 1893, having two short rollers at the front; can you now produce such shelf?

A. Yes, sir; I produce the shelf here.

Counsel for complainants asks that the shelf produced by the witness be put in evidence, and that the same be marked Exhibit New No. 4 Roller.

Mr. CHURCH: The introduction of the shelf referred to is objected to by counsel for defendant- on the ground that it does not appear that it has anything to do with this accounting. It does not appear that it is within the order of the court under which this accounting is taken, and it has not been shown that this particular shelf is an infringement of the patent in suit. The tender of the evidence is, therefore, objected to on account of its incompetency, immateriality, and irrelevancy.

The auditor overrules the objection and an exception is noted.

Q. I have requested you to state the number of the latest new No. 4 shelves manufactured and sold; are you prepared to do so now?

Objected to on behalf of the defendants.

A. Yes; I have a list of all the shelves of that style billed to us by our manufacturers and sold in this country between June 6th and September 12, 1893.

296 Q. Do I understand that you have not made or caused to be made any other form of shelf with two separated front rollers than that like Exhibit Latest No. 4 Shelf since June, 1893?

A. After the decision in this case was rendered the manufacturers were instructed to make in future a shelf like the new No. 4, and I am informed that no others were made, and I know positively that no other shelves with two short front rollers with hand space between, except one like Exhibit New No. 4, have been made.

Q. How many of said shelves—new No. 4 shelves—were made by or for you between June and September 15, 1893?

A. 4,161, as the abstract from the bills shows.

Q. State just how you have fixed the number that were manufactured.

A. I had a clerk in the office go over all bills from Yawman & Erbe and draw out every shelf of No. 4 style that he could find, giving the dates, sizes, and parties to whom they were sold.

Q. Did you embody your examination in the form of a statement; and, if so, will you produce the same?

A. Yes, sir; I hereby produce the statement made out in the manner stated.

The statement produced by witness is offered in evidence and marked Exhibit Memorandum No. 2.

Mr. CHURCH: Objected to on the ground of being incompetent, immaterial, and irrelevant.

The objection is overruled. Mr. Church notes an exception.

297 Q. Then I understand that you have testified in answer to my previous question that the total number of shelves like new No. 4 shelf made by defendant company at any time up to September 15, 1893, is 4,161 shelves. Is that so?

A. Yes, sir; to the best of my knowledge and belief.

Q. Do you know of anything that you could have done that would have enabled you to arrive at any other statement or estimate as to the number of shelves manufactured?

A. No, sir; the only way is to take the bills of our manufacturers.

Q. Have you at any time procured the manufacture of any shelves with separated front rollers and a space between by any other party or parties than Yawman & Erbe?

A. No, sir.

Q. Have you licensed or authorized any party or parties to make such shelves?

A. No, sir.

Q. Have you given me the names of all of your managers or agents who have sold such shelves since the date of the patent sued of?

A. We have 20 or more agents who are selling shelves all the time.

Q. Are those other agents to whom you have referred in your last answer agents who act independently of the managers of your various branch offices, and how do the accounts of the sales of these other agents reach you?

A. The names mentioned in previous testimony are the managers of the branch offices of the company. They keep their own books, with the exception of Morrison, at Washington, and have reported up to April 1, 1893, monthly the total sales, expenses, etc.

298 The subagents referred to report to the different managers, and their sales are reported by said managers to the Rochester company.

Q. I would like you to give me the names of any parties to whom you have sold shelves for sale to others other than your regular managers since the date of the patent sued on to September 15, 1893.

A. George Richter & Co., Boston, Mass.; Office Specialty Co., Pittsburgh, and we sell also on a commission basis to Brown, Tracy & Co., of Minneapolis or St. Paul, Minn.; Perkins Bros., of Sioux City, Iowa; I am not sure where these latter parties are, but they are in connection with the Chicago branch, and there may be some others.

Q. In making up your statement of the number of shelves sold by you, which statement was filed September 15, 1893, and in your

statement of the number of new No. 4 sold by you and stated to be 4,161 have you included shelves sold not only by your managers at your different branch offices, but also all shelves sold any other way, on commission or otherwise, by all of your managers, agents, or other parties?

A. I have reported every shelf sold anywhere and by anybody in this United States, as far as I know, to the best of my knowledge and belief.

Q. Have you on hand unsold any No. 4 shelves; if so, how many?

Mr. CHURCH: I object on the ground that it is immaterial.

A. We never keep a stock of any shelves. As soon as the contract is made the order is placed with the factory and manufactured. We may have a half a dozen or more shelves that are in samples, especially of this latter new No. 4.

—. Then neither the Rochester company nor any of the managers or agents have on hand any of the 24,498 roller shelves
299 which were stated to have been manufactured up to September 15, 1893, in your statement of that date?

A. No- to my knowledge, except a few that might have been in samples and may be laying around on the shelves.

Q. Then if it should appear from an examination of the bills rendered you by Yawman & Erbe that they had furnished you with more than 24,498 shelves you would have sold all that they furnished you; there would be none on hand except a few samples; is that so?

A. Yes, sir.

Q. Referring to the agents or managers at your different branch offices, I understand that they are salaried agents of the company; is that so?

A. Yes, sir; they are salaried agents.

Q. Referring also to those who have received goods on commission and other agents, I will ask you whether you have the power to fix the prices of the shelves sold by these various parties and whether that has been your practice.

A. According to contracts with some of our men, we have no power to fix prices at which they should sell, but we have requested from time to time that these men must sell goods at certain prices when coming in competition with certain manufacturers.

Q. Then you practically have control of the prices at which your goods are sold throughout the United States—that is, if a party should not sell according to your instructions you could refuse to furnish them goods?

A. No, sir; I have not.

Q. You can discharge your managers, can you not?

A. Can discharge managers; yes, sir.

300 Q. Can you not refuse to sell to those who are selling on commission if they do not sell according to your instructions?

A. I don't think that we can refuse to sell these goods to some parties with whom we have regular contracts.

Q. Who are those parties with whom you have regular contracts?

A. George H. Richter & Co, Office Specialty Company of Pittsburgh; Everett Waddey & Co, of Richmond, and H. W. Dick & Co., of Baltimore.

Q. You have referred to requests you have made to these parties. Have they always followed those requests as regards the sale of goods?

A. To the best of my knowledge and belief, they have followed instructions of that sort.

Q. Are your agents and managers in the habit of reporting to you the names of the parties to whom they make sale or with whom they make contracts for the sale and erection of the goods?

A. Our managers to April 1, 1893, billed the goods to the parties to whom they were sold. In many instances the name of the party to whom the goods were sold was given on orders and in some not, while the agents, such as Richter & Co., of Pittsburgh, in many instances do not give to us the names nor the amounts at which the good- are sold.

Q. State whether you have any record or memorandum of any account showing the parties for whom the shelves were to be erected or put in use that were sold by Richter & Co.

A. We have no memorandum or record, except as might appear on the order given by Richter, which in some instances stated the names of such parties.

301 Q. I would ask you to produce any of the orders given by Richter & Co. which have such statement upon them.

A. I can. Such orders are at Rochester.

Q. Will you do so?

A. I will.

Q. You have produced what is entitled a monthly statement from April 1, 1891, Rochester, N. Y., to the Office Specialty Manufacturing Co. Am I right in understanding that that statement is a statement of No. 4 shelves sold from the Rochester office to different parties?

A. Yes, sir.

Q. I would like you — state whether there are any other items in this statement, memorandum No. 1, that are, as you have before stated, based upon guesswork other than the first two which you have marked with a X—one the American Water Works Association and the other the York Trust R. E. & D. Co. and Richter & Co. I am referring to the statement of the number of shelves, not to prices.

A. In my former testimony I do not think that I stated, or at least I did not want to state, that the number of shelves put down was guesswork. The number of shelves mentioned in this memorandum No. 1 are the quantity given in our books, and, to my best knowledge and belief, they are the correct number of all shelves sold as taken from the respective sales books.

Q. Now, I ask you the same question as to prices instead of number. What I want to get at is whether there are any others upon

that list than those you have marked where you are not certain as to the correctness of the prices set forth in said memorandum No. 1.

A. There are a great many, and if I had to state what was guesswork I think I might mark more than half.

302 Q. Will you put a cross opposite each one of the items giving the selling prices which you do not know to be correct? This you may do during recess or after adjournment.

A. I will do so.

Q. To what extent are you uncertain as to the correctness of the items about which you are not sure? In other words, what would be the possible variation in comparison between the prices at which the articles are actually sold and those stated in memorandum No. 1?

A. It is impossible for me to get at the selling price of those shelves for the reason that most of them have been sold in combination with other goods which we manufacture, and in some instances the shelves are $\frac{1}{2}$ and in some cases $\frac{1}{100}$th part of such cases—that is, of the entire job. Our mode of estimating on jobs is: in some cases we take the different articles, set them down at prices at which we usually sell those goods. We take, for instance, a job that amounts to $500. Figure in this manner: We offer the goods at that price. A party might say the price is too high; have to come down, and we will sell these goods at such prices as we can agree upon with the purchaser. We have been known to give 20 per cent. off and as high as 50 per cent., and although we do not figure according to percentage we give off a certain amount at which we think we will be able to sell the goods.

Q. 20 or 50 per cent. off of what?

A. Of the total price.

Q. Have you any standard price for selling shelves?

A. We have in some instances.

Q. Have you any schedule price which you furnish your agents?

A. Well, we have a schedule price at one time, from the

303 latter part of 1890 to 1893, about.

Q. What was the schedule price at that time of the No. 4 shelf?

A. Of regular size up to 20-inch it was $2.20. I have no list with me and have not in my mind the actual amounts.

Q. I request you to furnish me with a list of your schedule prices to which you have referred.

A. I will.

Q. And these schedule prices, I understand, were the prices at which the goods were billed to the agents. Am I right?

A. No, sir.

Q. Well, what were they?

A. To Richter & Co., the Office Specialty Co., Everett Waddey & Co., Diek & Co., and others they were billed at cost, with a percentage added of 33⅓ per cent.

Q. As to others how were they sold?

A. I cannot say as to this in every case, but I know in some instances, especially to Perkins Bros., of Sioux City, Iowa, they were

billed at a regular price with some discount off—from 33⅓ to 35 per cent.

Q. Was that regular price at which they were sold to Perkins & Bro. the schedule price you have referred to?

A. I think it was the schedule price after we adapted it.

Q. Referring again to memorandum No. 1, does that contain, to your knowledge, a correct account of the parties to whom the goods therein specified were sold?

A. Yes, sir; to the best of my knowledge and belief.

Q. And are the *tools* of amounts specified in memorandum correct?

A. To the best of my knowledge and belief they are correct.

304 Q. Referring to the statement of expenses in clause D of the statement filed by you September 15, 1893, as being $345,474.87, state what items went to make those expenses.

A. All expenses that we have had in connection with the business, such as salaries, rents, interest, clerk hire, traveling expenses.

Q. Yawman & Erbe bills?

A. No; I think not.

Q. Do cost of materials?

A. We have no cost of materials.

Q. How do you estimate the gross expenses referred to in c-ause D in your statement of September 15; was it by an examination of your books showing the total expenses from year to year?

A. At Rochester these expenses were taken from our ledger and at the different branches from their respective ledgers.

Q. You have in clause B of the statement of September 15 referred to the cost of production of shelves. So far as you were concerned, was there any other cost of production of said shelves except the amount which you paid to Yawman & Erbe?

A. No, sir.

Q. State whether the Yawman & Erbe bills as they have been produced by you contain a correct statement of the No. 4 shelves furnished to you by Yawman & Erbe and the amounts that you paid to Yawman & Erbe for said shelves.

A. Yes, sir; they are, to the best of my knowledge and belief. Not one bill has been taken out of the file, and the amounts in the bill — correct.

305 The said Yawman & Erbe bills are offered in evidence, and it is requested that they be designated Exhibit Y. & E. Bills. Counsel for complainants states that with the consent of the court these bills may remain in the hands of defendants to be produced whenever required by either the court or the parties hereto.

Q. State whether the Office Specialty Manufacturing Co. or the members thereof are interested, directly or indirectly, in the firm of Yawman & Erbe.

A. No, sir; neither of them.

Q. In your statement as to the amounts received for No. 4 shelves and contained in memorandum No. 1 have you estimated any

amounts received from the cases containing shelves—that is, for any amount received except for the shelves themselves?

A. I will say that 95 per cent. of the shelves mentioned are in cases, while I believe that the remaining 5 per cent. are for shelves outside of cases.

Q. Take the item reading as follows: "21–10 Roch. Ger. Ins Co., 2.40–24." I understand that 2.40 indicates the price per shelf charged to the Rochester German Ins. Co. for shelves furnished to that company, and I would like you to state whether the 2.40 includes any charges for the cases or not.

A. The charges includes the cases.

Q. Then there was a case containing 10 21-inch shelves furnished to the Rochester German Insurance Co. and the price paid was $2.40; is that correct?

A. Yes, sir.

Q. And I understand that about 95 per cent. of the total number of shelves named in memorandum No. 1 were furnished to the different parties specified in said memorandum in cases and the
306 prices under the price column were the actual or estimated prices per shelf received from the sale of said cases with the shelves, and that the amount in the "total column" indicated the total price received from both the shelves and cases; am I right or not?

A. Yes, sir.

Q. Did you not furnish your agents and managers with a standard schedule or list — prices at which certain goods would be sold under ordinary circumstances, so that if a party wrote to one of your managers and asked the price of your 21-inch No. 4 shelves he would have a standard from which to give his answer?

A. We have such schedule, but the price at which the goods were to be sold was left to the discretion of the agents or managers.

Q. Was that a printed or written schedule furnished each agent?

A. It was typewritten.

—. I want to get your own estimate as to the price at which the shelves should be sold, and this is what I referred to when I asked you to produce that schedule. You will therefore understand now what it is that I want to be produced here.

Q. Referring to memorandum No. 2, does this memorandum state correctly the parties to whom the different new No. 4 shelves were sold?

Mr. CHURCH: I object to this and all further questions in this same line of examination—that is to say, all questions relating to memorandum No. 2 objected to as irrelevant, incompetent, and immaterial.

The objection is overruled.

A. The list was made from the bills of Yawman & Erbe,
307 and to the best of my knowledge and belief is correct. It is also correct as far as the names to whom the goods were sold.

Q. I understand that the figures following the name of the pur-

chaser indicate the number of No. 4 shelves sold to such parties, and that the next column gives the sizes and sometimes states the character of the case and the number of tiers of shelves; is that correct?

A. Yes, sir.

Q. I will ask you to add to memorandum No. 2 another column, giving the prices at which these goods were sold to the respective parties; will you do so?

A. I will if I can get the amounts from the bills.

By Mr. CHURCH:

Q. Mr. Lomb, I wish you would explain a little more fully than you have, as appears upon the record, the difficulty you have experienced in ascertaining just what the cost has been of the shelves that you have made like shelves No. 4, and in ascertaining what proportion of the selling price has been properly chargeable to the shelves themselves.

A. The work on which we are asked to figure is to a very large extent combination work. It contains in many instances as many as ten combinations. As a good illustration I refer to figure 12 of "Complainant's Exhibit Office Specialty Manufacturing Company's Catalogue." It contains cupboards, drawers of different sizes, letter files, expense files, document files, upright book stalls and roller shelves, also a base and cornice, and in many instances panels for the exposed sides of such cases. As our agents meet cases of this kind a certain schedule which they have is taken and the prices put down according to this schedule for each separate
308 article. He makes his estimate to the party and tries to sell at a price at which he can get the order. Now our schedule calls for certain prices on work of this kind with combination, but this price they are informed is wholly inadequate in instances of this kind on account of the larger cost of manufacture. After we have the order it is placed with the manufacturers. They furnish the work, bill it to us at a price figured upon their labor. In some cases they make a detailed statement of all of the articles separate.

Q. Do the managers in all instances in their bills rendered to you indicate the price which they charge for the separate elements or articles going to make up these combination cases you say?

A. Not in all instances, but in a great many, especially where the work is not so much of a combination nature.

Q. Why is it that you are not able to state just what prices you have received for the shelves sold in a case containing a combination of elements, including shelves such as illustrated in figure 12 of the catalogue referred to?

A. Because in a very few instances we render bills to purchasers giving separate amounts for the different articles furnished.

Q. Can you not in any considerable number of instances state what the profit has been resulting from the sale of the shelves in a combination case, such as shown in figure 12 of this catalogue?

Mr. FOSTER: I object as being irrelevant, incompetent, and immaterial.

Objection overruled.

A. It is impossible.

Q. Can you in any instance where you have sold a com-
309 bination cabinet, such as illustrated in Fig. 12 — this catalogue, state what the actual price received from the shelves in such a cabinet has been?

A. I think I can get at the actual price received per shelf in but very few instances.

Q. I notice in the sales book No. 2, which has been produced here, a number of headings, such as the following: "Date, No. folio, total cost, files, cases, cabinets, cupboards, stock S. S., indexes, special S. S. indexes, wood doc. files, metal doc. files, book shelves, universal files, cabinets Monroe files, sundries." Will you please explain how the book came to be made up in this way and the object in making it up in this way?

A. When making up this book it was our intention to keep separate as much as possible the different articles which we sell. In some instances, in fact in most of them, we have been able to carry this out, but it has been impossible to do this in the headings "metal doc. files" and "book shelves" for the reason that it is very seldom that we furnish either of these kinds separate from each other.

Q. Are we to understand that you found it impracticable, although you attempted to do it, to keep an accurate account of the prices received from the sale of the shelves that formed parts of cabinets and other structures?

A. It was not only impracticable, but impossible.

Q. You could not do this if you wished to do it?

A. No, sir; we could not do it, no matter what we devised to keep them separate.

Q. Supposing in the case of the sale of a cabinet like that shown in figure 12 of the catalogue referred to you should offer me the whole thing for $1,000, upon what basis would you make that estimate?

310 A. I would try to make up the price or estimate according to certain schedule prices that we may have and add a percentage or a certain amount to it according to the combination or make an estimate simply from the schedule price if I would know that I could not get a better price than that, although on account of this combination the cost would be considerable more than a less combination case would be, the estimate for which I would make according to the same schedule.

Q. Supposing, in the case I have put, instead of paying you the $1,000 which you at first asked for this cabinet, I should afterwards agree to pay you $800 for it and you should accept my offer, will it be possible, in such an instance, to tell what had been the selling price of the shelves in that particular case or cabinet?

A. I do not think it would be.

Q. I understand you to say that you will mark upon Exhibit Memorandum No. 1 a X opposite each entry in which the shelves relating to that entry were included in cases of some kind at the time of sale; do I understand you correctly?

A. I will make a X on this memorandum No. 1 to each entry where the amounts we have received for these shelves is guesswork.

Q. Assuming that you have so marked these entries or items, I wish you would state upon what basis you inserted any price as the price for the sale of shelves mentioned in that entry.

A. I had the maximum schedule price entered as the amount received for the shelves; in some cases where goods have been sold to commission men such as Richter & Co. and the Office
311 Specialty Company the cost of the goods was taken, adding the regular percentage.

Q. Why did you make use of the maximum schedule price in this instance?

A. Because I thought complainants could find the least fault by doing so.

Q. Then, in those instances where you have put in what you believed to have been the maximum price of the shelves the entry does not represent the actual selling price of said shelves?

A. The entry does not represent the actual selling price; our books do not show at which price these goods were sold, and it is impossible for me to give the price at which they were sold.

By Mr. FOSTER:

Q. You referred to the fact that while you had a normal price for certain articles your agents were instructed that they might sell at lower prices under certain circumstances; I understand that these circumstances arose from competition, and they were instructed that if they had to enter into competition with other parties that they might offer the goods at lower prices for the sake of affecting the sale; was that so?

A. Yes, sir; but at the same time we have many instances where we do not have competition, and rather than create a competition or make the would-be purchaser write for other estimates the job would be closed at 10 or 15 per cent. lower rather than to get that competition in.

Adjourned subject to notice.

312 APRIL 22, 1895.

Counsel file an additional deposition of Mr. Lomb under stipulation.

313 Foster & Freeman, counselors in patent causes, 931 F street, Washington, D. C.

Long-distance telephone 224, Washington.
Cable address, Retsof, Washington.

(Dictated.)

APRIL 15, 1895.

Jas. G. Payne, Esq., auditor of the court, D. C.

DEAR SIR: Please find enclosed additional testimony of Mr. Lomb in the case of The Fenton Manufacturing Co. *vs.* The Office Specialty Company, which is presented by stipulation between the parties and which we request to be filed as part of the evidence in the case.

Very respectfully, CHARLES E. FOSTER,
Att'y for the Fenton Mfg. Co.

314 FENTON METALLIC MANUFACTURING COMPANY
vs.
OFFICE SPECIALTY MANUFACTURING COMPANY. } #13793.

It is stipulated that if the witness C. F. Lomb was recalled and duly questioned he would reply as follows, and the questions and answers may be received and read as if duly given upon oral examination before the auditor, taken after due notice.

CHARLES E. FOSTER, *For Pl'ff.*
CHURCH & CHURCH,
Sol'rs for Defendant.

Ap'l 3, '95.

Q. Please state approximately, as far as you know, the amount expended by the assignees of Jewell & Yawman in the contest between Jewell & Yawman and Hoffman in the United States Patent Office relating to the shelf in controversy.

A. Cannot say exactly; not to exceed $800.00.

Q. State as nearly as you can the proportion of shelves sold by you that were sold in competition with the Fenton Company.

A. Cannot tell; no means of ascertaining; impossible to say.

Q. You have heretofore been requested to produce a schedule of prices, such as you furnished your agent with, for the purpose of guiding them as to the prices to be asked for shelves of the character to which you have testified. If you have said schedule produce the same and mark it with your initials.

A. I here produce schedule of prices of roller shelves, marked with my initials. Prices include the cases. Proportion of shelves
315 which we sell without cases as compared with those we sell with cases is as 9 to 110.

(The schedule thus produced is offered and put in evidence and marked "Exhibit Defendants' Schedule of Shelf Prices.")

Q. Please produce the bills of Yawman & Erbe for the new No. 4 shelves manufactured for you by them since September 12th, 1893, to date.

A. I here produce bills of Yawman and Erbe for the new No. 4 shelves manufactured for us from September 12, 1893, to Jan. 1, 1895. It is impossible to give complete list to date.

(The bills thus produced are offered and put in evidence and marked "Exhibit Y. & E. Bills No. 2.")

Q. State how many shelves of the character like the new No. 4 shelves are shown to have been manufactured by the said bills No. 2.

A. 11,003 shelves; mostly in cases.

Q. State whether these bills of Yawman and Erbe designate the only shelves of the new No. 4 pattern or the only shelves with divided front rollers and a space between that have been manufactured for you or your company since September 12th, 1893, to date.

A. Yes; to January 1, 1895.

Q. State how many of the said shelves referred to in the said bills have been sold and who to.

A. They have all been sold as per list attached, marked with my initials.

Q. You have stated that your agents were instructed that they might sell at lower than the schedule prices, and you have
316 produced memoranda showing the number of shelves disposed of to the agents and amounts charged them. Please state the percentage of reduction below the schedule price or the prices mentioned in the memoranda that was actually made in settling with your agents, so far as you can with certainty fix it. This is, assuming the total amount charged to your agents in the said memoranda to have been so much, and the total amount paid by your agents in settlement of accounts to have been so much, what would have been the percentage of difference between the two accounts so far as you are able to determine it?

A. As goods are mostly sold in competition and many times at considerable reduction, it is impossible to state with any degree of certainty the price received for them. Shelves are in almost every case furnished with other work.

Q. State the cost and selling price of the straight shelves compared with those having the hand hold, comparing like sizes.

A. The cost price of roller shelves with straight front roller is between five and ten per cent. less than that of those with divided front roller, while the selling price is the same, and we have sold 23,938 shelves with the straight front roller during the same period in which we have sold 11,005 with divided front roller.

317 *Schedule of Prices of Roller Shelves in Cases.*

(Either straight or divided front roller.)

20 x 4½ x 14″ or less in width or depth	$2 20	$2 40
24 x 4½ x 16″ or less in width or depth	2 50	2 65
30 x 5 x 20″ or less in width or depth	3 00	3 25
Over 30″ wide, in quantities of 20 or less	5 00	5 50

C. F. L.

"Exhibit Defendants' Schedule of Shelf Prices."

	N. Y. branch	4	
	San Francisco	35	No case.
	Security, Loan & Trust Co., S. F	13	
	Lackawanna Co., Pa., H. O.	297	
	San Francisco	4	No case.
	Union savs. b'k, San José	24	
	N. Y. branch	144	No case.
	Comb. sample case	43	
	York Co., York, Neb.	20	
		60	
	N. Y. branch	10	
	Tacoma, Wash	40	
	Co. auditor, St. Paul	10	"
	Glass & Pradhomme, Portland	14	
	San Francisco	16	"
	Fresno Co., Fresno, Cal	80	
	N. Y. branch	1	"
	San Francisco	10	
	Bristol Nat. bank	20	
	Blair Co., Hollidaysburg	518	
	San Francisco branch	4	"
	Traveller's Ins. Co., Hartford	40	
	Lackawanna Co., Pa	30	
	Phila. branch	30	
	Nat. Shoe & Leather b'k, N. Y.	33	
	Cleveland Desk Co	30	
	N. Y. branch	24	
	L. F. Noyes, Gordon City, Tex	60	
	N. Y. branch	1	"
C. F. Lb.	Pro. judge, Farmington, Utah	13	
	N. Y. branch	6	"
	Municipal bldg., Scranton, Pa.	48	
	Office Spec. Co.	96	
	B'k of New Rochelle, N. Y.	6	
	Dick & Co., Balto	9	"
	N. Y. branch	14	
	Phila. "	5	
	Home "	28	
	Montgomery Co., Morristown, Pa.	72	
319	N. Y. branch	10	
	Janesville Mach. Co	40	
		96	
	Montgomery Co., N. Y.	252	
	Co. clerk, Rossburg, Ore	47	
	Beadle Co., Huron, S. D.	65	
	G. H. Tanner, Atlanta, Ga	480	
	Burke Co., Reading, Pa	8	No case.
	Bowery sav's b'k, N. Y.	362	

Ins. commissioners, Hartford	8	
N. Y. branch	41	
Do.	8	
San Francisco	27	"
G. H. Richter & Co	1	
A. H. Robertson, N. Haven, Ct	60	
Office Spec. Co	14	
U. S. dist. court, Tacoma, Wash	5	
Centre Co., Bellefonte, Pa	451	
T. Loomis, N. Y	70	
City Fire Ins. Co., N. Y	54	
Cleveland Desk Co	48	
N. Y. branch	6	"
Wm. Schwartzwalder & Co	40	
N. Y. branch	64	
Office Spec. Co	42	
Nat. City b'k, Brooklyn	28	
C. M. Burton, Detroit	36	"
Ind. Nat. bank, Indianapolis	16	
Westchester Co., N. Y	1,628	
Do.	1,672	
	358	
City clerk, Kokomo, Ind	30	
Minn. Logging Co	5	
Howes Life Ins. Co	5	
Clerk of board, Phœnix, Org	10	
C. M. Burton	1	
Cmb. sample case	3	"
Trunk " "	3	"
N. Y. branch	18	
Surrogate, Belvidere, N. J	132	
Comptroller, Annapolis, Md	283	
Register office, White Plains	60	
N. Y. Underwriters, N. Y	18	
McKean Co	50	
Co. clerk, Flemington, N. J	75	"
Meriden sav's b'k, Meriden	4	
E. S. Rhodes, city hall, Providence	659	"
320	9,305	
Co. clerk, Montgomery Co., N. Y	110	
T. B. Cameron, treas., N. Lisbon, &	9	No case
Delaware Co., Manchester, Pa	419	
C. F. Lb. Co. clerk, Richardson Co., Neb	490	
Do. Los Angeles Co., Cal.	614	
Hanover Fire Ins. Co	35	
N. Y. Underwriters' Agency	21	
	11,003	

321 JANUARY 31, 1896—10 a. m.

Hearing pursuant to notice.

Present: Mr. Foster, for the complainants, and Mr. Church, for the defendants.

JAMES W. HINE, having first been duly sworn, testified as follows:

By Mr. FOSTER:

Q. What is your name, age, residence, and occupation?

A. My name is James W. Hine; I am 45 years of age; I reside at Jamestown, New York; I am engaged in manufacturing and selling metallic office fixtures and furniture.

Q. You are connected with the Fenton Metallic Manufacturing Company?

A. Yes, sir.

Q. State in what capacity you are employed.

A. As general manager and vice-president of the company also.

Q. How long have you been connected with that company?

A. About eight years; since its organization.

Q. Are you the J. W. Hine who testified in the interference between Hoffman, Jewell, and Yawman in the U. S. Patent Office and in this suit heretofore?

A. Yes, sir.

Q. State if you had any experience in connection with the selling of roller shelves out in the market.

A. I have.

Q. Are such shelves sold by the Fenton Company directly or through their agents generally?

A. They are sold largely through the agents.

Q. About what proportion of the roller shelves that are
322 sold by the Fenton Company are sold by competition or under competition?

A. Nearly all; I should say nineteen-twentieths, at least.

Q. Have you ever personally conducted any of the proceedings connected with the sale of shelves under competitive bids?

A. I have; yes, sir.

Q. Have you conducted any such proceedings where the Office Specialty Manufacturing Company have been the competitive bidders?

A. Yes, sir.

Q. I would like you to state the character of the proceedings in such cases.

A. Well, of course, the circumstances were differ—different points in showing the goods to prospective buyers. I have frequently heard them remark that they were not considering a roller shelf with a long roller. Of course, my argument has always been in favor of my own roller shelf, and in making this statement I have been told repeatedly that they were not considering anything but a roller shelf smaller.

Q. What I wanted to bring out was whether or not in the case of

such competitive bids or proceedings offers of a roller shelf like the Fenton roller shelf were given by the Office Specialty Company.

A. They have been; yes, sir.

Q. Then, as I understand, in such cases where the Fenton and Office Specialty Company have been represented, both parties offered the divided roller shelf, and the straight roller shelf was also offered by the Office Specialty Company?

323 A. I have so understood it by the buyers themselves.

Q. I am referring to the cases where you have been present.

A. Yes, sir.

Q. Are these bids generally made after an advertisement or not?

A. As a rule, yes, sir; but frequently they are not. Frequently they would call bidders together by correspondence, by writing to each that they would meet and consider it. It was frequently done and in many instances it was advertised, and perhaps the majority of instances.

Q. State whether or not in such cases you have called attention to your letters patent and what the effect of doing so has been upon the parties purchasing.

A. In almost every instance when I show the goods myself to prospective buyers I bear as heavily on the point of the divided roller shelf as I can and almost invariably call attention to the claims in the patent and usually to the extent of reading them myself, if I can get the attention of the committee long enough to do that and if the time is not too limited and I have it in such form as to enable me to do that, and I would say that in many instances in pressing that point—in fact, in almost every instance when pressing that point—I met with the proposition by some one or two members of the committee, perhaps, that others agreed to furnish the same thing, so they could not consider the point of the patent, as they could get the same thing from others, or substantially the same thing.

Q. State whether or not you have practically had any competition other than the competition of the Office Specialty Company until within the last year.

324 Objected to as leading by counsel for defendant.

A. There were people in the field selling or offering for sale goods for the same purpose, but they were not what we regarded as competitors and were not strong competitors.

Q. Give the names.

A. There was George D. Barnard & Co., of St. Louis, Mo.; the St. Louis Art Metal Company of St. Louis, and the Hoffman & Keefe Office File Company of Milwaukee.

Q. Why did you not regard their sale of the divided roller shelves as competition?

A. They had not become as well known in the business and had not advertised sufficient to become known in the business to push their business to that extent. They were comparatively new in the

field. I understand your question to mean up to a year or such matter ago.

Q. I understand that within the last year the competition has become more active.

A. It has; yes, sir.

Q. State whether or not you have instituted any proceedings against any of the other parties named or instructed them to be instituted.

A. We have; yes, sir.

Q. What is your standard size of shelf?

A. Twenty inches wide between centers.

Q. What is your schedule selling rate for that shelf?

A. Two dollars.

Q. Is it listed at that or is that the selling price?

A. It ranges about that; depends something upon locality. Our selling price must include freight and delivery, and west of the Rocky mountains, or even as far west as Denver, we get a
325 better rate than that to cover the advanced freight.

Q. State whether or not you have ever been compelled to lower this rate in consequence of competition by the Office Specialty Company.

A. We have; yes, sir.

Q. Assuming that you had no competition by the Office Specialty Company in the selling of the divided roller shelves since the issue of the Hoffman patent, can you form any estimate of the additional number of divided roller shelves you might have sold in such case?

A. Well, I confidently believe that we would have sold over a hundred thousand of them.

Q. Mr. Lomb has stated that the continuous or long roller shelf would cost about ten per cent. less than the divided roller shelf. What is your opinion on that point?

A. I should place it at from ten to fifteen per cent. My impression is it would be a little more than ten per cent.

Q. What would be the relative loss of storage space if, instead of having the hand hold in the center, the shelf was made long enough to permit the fingers to take hold of the book at the opposite ends? Would you have to have a longer shelf in such case?

A. The shelf would necessarily have to be made about two inches longer to do that. That would simply mean one-tenth additional space.

Q. In the case where 20-inch roller now is used?

A. Yes, sir.

Q. State whether or not you have in any way given notice to the public of the claims of the Hoffman patent; and, if so, how.

A. We have given notice through our printed matter, such as we mail to every prospective buyer.

326 Q. Will you produce a specimen of such printed matter?

A. I produce this circular (producing circular).

Counsel for complainants offers the circular produced by the witness in evidence, and it is marked "Plaintiff's Exhibit Hine Circular."

Q. State where in the said circular the notice you refer to is to be found.

A. On page 11.

Q. Are you familiar with the different forms of the new No. 4 shelf which the Office Specialty Company is offering for sale?

A. I am; yes, sir.

Q. Can you produce any illustration of the same?

A. I can.

Witness produces drawing of shelf, which is offered in evidence by counsel for complainants and marked "Plaintiff's Exhibit Hine Drawing."

Q. State whether or not you find in Plaintiff's Exhibit Hine Drawing the combination of elements set forth in claim 2 of the Hoffman patent in suit.

Objected to by counsel for defendant as incompetent and irrelevant and immaterial, no proper foundation having been laid for such mode of examination and the witness being clearly incompetent to construe the patent and to determine what its claim covers.

Counsel for plaintiffs calls attention to the fact that the witness Hine has heretofore been examined in the suit upon its merits as a practical constructor of roller shelves and has testified to his knowledge of the meaning of the claim of the Hoffman patent as a

327 mechanical construction, and that he is perfectly competent in such case to state as a practical constructor whether or not a given article comes within the terms of description of the claim, he not being examined as a patent expert.

The AUDITOR: It seems to me the witness may be qualified to answer a question of that kind from personal occupation, his connection with the article in question, and acquaintance with it.

Mr. CHURCH: The point I make is, the question is such that the witness is required to construe the claim and to determine what it means before he can say whether or not a given structure is within the terms, which I do not take it to be the province of Mr. Hine or any other person who occupies a position such as he does on this stand.

The AUDITOR: I am disposed in all of these cases where I have doubt to admit the testimony. Of course, I shall decide its application to the issues when I come to make up the report. I have sufficient doubt as to this to let it in, and the objection is overruled for the present,

Question repeated.

A. I do.

The AUDITOR: I want to say, Mr. Foster, that it seems to me the evidence ought to be a little more in detail here than that general answer to that question.

Mr. FOSTER: In view of your suggestion I will follow the question with one or two that are more specific questions.

Q. I find that the second claim of the Hoffman patent calls for a

book shelf. Does the Hine drawing illustrate a book shelf?
328 A. It does; yes, sir.

Q. I find that that claim calls for a series of horizontal rollers; do you find a series of horizontal rollers in that drawing?

A. Yes, sir.

Q. Will you please put a letter upon each of the rollers and state what you designate it?

A. I put the letter R on each of the horizontal rollers.

Q. How many horizontal rollers do you find?

A. Five.

Q. State whether or not you find what you would call a front roller, which is called for in the said claim.

A. Yes, sir.

Q. How many sections is it in?

A. It is in two sections.

Q. Will you please put another letter on the two sections of the horizontal roller and say what letter you put on them?

A. The letter S.

Q. The claim calls for a front roller in two separate sections. Is that front roller in two separate sections or not?

A. It is.

Q. The claim calls for a frame; do you find a frame illustrated in your drawing or not?

A. Yes, sir.

Q. Put a letter on the part which you designate as frame.

A. The letter F.

Q. The claim calls for the intermediate part of the frame being carried back to permit the admission of the hand between
329 the roller sections. State whether you find that feature in that drawing.

A. I find it placed back.

Q. Please state the object of having the space between the sections into which the hand can pass.

A. To permit the grasping of the book in the center with one hand.

Q. State whether or not the construction having the features or claiming to, as I have read them, accomplishes the same purpose that the roller shelf manufactured by the Fenton Manufacturing Company effects.

A. It does.

Q. You have stated that the Office Specialty Co. shelf like that of the Hine drawing has been offered in competition with the Fenton Metallic Manufacturing Co. shelf or the Hoffman shelf. State whether or not you have heard any statement made as to any differences in practical operation between the two shelves at any time?

Objected to by counsel for defendant as calling for hearsay evidence.

Mr. FOSTER: I think, Mr. Auditor, we have a right to that, because here is a witness who has been present when these shelves have frequently been offered in competition, and I want to put be-

fore the court the facts, asking him whether or not it has been publicly recognized that they are the same and substantially the same in purpose and effect or whether they are different. I am perfectly willing if any one has ever said that they are different in effect or operation to have it come upon the record.

Mr. CHURCH: I presume it can be shown without pressing that. That character of testimony is entirely improper.

330 The AUDITOR: I think the general rule is that such testimony is incompetent.

Q. State whether or not you recognize, as one familiar with the manufacture and sale of such shelves, any difference in practical operation between the shelf of the Hoffman patent and the shelf of the Hine drawing.

A. I do not.

Cross-examination.

By Mr. CHURCH:

Q. The alleged loss of sales of an hundred thousand shelves was arrived at by pure guesswork, I suppose?

A. It is estimated. I simply believe that.

Q. It is not the result of a close calculation in figuring up the matter, is it?

A. Why, no; I can't say that it is.

Q. You have undertaken to state what is covered by the second claim of the Hoffman patent in suit. I would now ask you if, in your judgment, the structure shown in figure 2 of the Hoffman patent No. 437,833, which I now hand you, is, in your judgment, described by the second claim of the Hoffman patent 450,124 in suit, which reads as follows:

"2. In a book shelf the combination of a supporting frame, a series of horizontal rollers, the front roller in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between such roller sections, substantially as described."

A. To all intents and purposes, I should think it is.

Q. You think, then, that the language employed in that claim applies to the structure of the Hoffman patent No. 437,833?

331 A. I think so; yes, sir.

Q. Please refer now to the Hoffman patent in suit and point out in the drawing thereof the intermediate part of the frame that is said to be carried back to permit the admission of the hand between the roller sections?

A. There are two parts here. I would suggest that only one of them is marked at all. I take it that that part is carried back, and also that part in that drawing. Any part of the frame that is carried back sufficiently to leave a space between the series of rollers I should think would be covered by the wording of the claim.

Q. I call your attention to the following portion of the specification of the Hoffman patent in suit, which will be found in the

second column, page 1, beginning with line 57 and ending near the end of line 64: "The middle U-shaped section C^2 is attached at its ends to the rear section C and extends from the back to the front of the case parallel with the sections C^1 C^1, and forms the center of the front side of the frame which is bent inwardly at C^4, thus exposing a portion of the back of the grasp and facilitating its removal from the case." Is or not this inwardly bent portion C^4 that is referred to in the second claim as the intermediate part of the frame carried back to permit the admission of the hand between said roller sections?

Objected to by counsel for complainants as improper cross-examination, this witness not having been called as one familiar with the construction of patents, but merely having been questioned as a practical manufacturer, and one familiar with the ordinary use of language, to state whether or not he found in defendants' construction anything corresponding to the words or claims of the patent.

This is very different from attempting the intricate duty of
332 determining what particular features of a drawing may or may not be included within the terms of the specifications, and plaintiff's counsel gives notice that if defendants' counsel pursues this line of cross-examination he makes the witness his own.

There is no objection to it going in with that understanding.

Mr. CHURCH: I do not see that I raise any very serious question. You will have a redirect examination. It seems to me, however, that this witness has undertaken to identify these two constructions as the same; he was asked particularly about this feature of the claim, and this is cross-examination upon that point. He stated in the preceding question—undertook to describe the drawing—and this seems to me to be a question following on the same line. It ought to be allowed.

Question repeated.

A. I am not competent to answer the intent of the party who drew the patent.

Q. Will you say that the part I have designated (I mean the part lettered C 4) in the patent in suit is not the intermediate part of the frame carried back to permit the admission of the hand between the roller sections referred to in the second claim of the patent in suit?

A. Well, now, I don't know whether it is or not, if I have got to answer the question right now. I have not looked into it.

Q. Suppose you read the patent through and tell me?

Objected to by counsel for complainants on same grounds.

(Witness reads patent.)

A. I won't say that it is or is not.

Q. You have undertaken to show in your direct testimony that the defendants' new shelf No. 4 embodied the structure
333 claimed in the second claim of the Hoffman patent in suit. To do that of necessity required that you should understand what the second claim covered. Now, I ask you point blank what

do you understand the second claim of the Hoffman patent in suit to cover when read in connection with the specification and drawings of the patent, to which it distinctly refers by the phrase "substantially as described."

A. Well, I understand the claim of the patent simply means to cover any opening between the rollers that will permit the removal of a book from the shelf, with no need of grasping it in the center and without the fingers coming in contact with any obstruction.

Q. And whether or not the intermediate part of the frame is carried back to permit the admission of the hand?

A. I do not get that question so that I can answer it straight.

Question repeated.

A. I do not see any question to it now.

Q. Do you mean to say that the claim covers any construction in which the intermediate part of the frame is not carried back to permit the admission of the hand between said roller section?

A. Well, if I understand this question, you simply ask me, Mr. Church, if I regard this claim as covering any roller shelf, whether there is room to insert the hand in the middle or whether there is not?

Q. No; I ask you whether or not you regard the second claim of the Hoffman patent as covering a roller shelf in which the intermediate part of the frame is not carried back to permit the insertion of the hand.

334 A. I should not regard it as covering such frame.

Q. I will ask you to read the patent again, if you think it necessary, and then tell me if the part of the frame which is bent inwardly at C 4 is not the intermediate part of the frame that is carried back to permit the admission of the hand between the roller sections, and I again call your attention to what is said in the patent, page 1, column 2, between lines 61 and 64.

A. Figure 1, C4, is the intermediate part that is carried back, as shown by that drawing. I take it that C 4 is the bar rather than the opening that is referred to; is it not?

Q. What do you understand to be the intermediate part of the frame carried back to permit the admission of the hand between the front rollers in Plaintiff's Exhibit Hine Drawing?

A. All of that part of the frame which is limited between and which supports the rollers, the forward rollers, of the frame.

Q. Is the part of the frame which supports the rollers the part that is carried back in the Hoffman patent in suit?

A. It is carried back; yes, sir.

Q. Please direct your eyes to the drawing of the Hoffman patent, figure 2, and state if it is not the fact that the parts that support the rollers are not carried back, and that the portion of the frame that is removed from the parts that support the rollers, to wit, the curved part C 4, is the part that is carried back.

A. I think the bar is carried back on either side of C 4. In this instance it is carried to the rear end of the frame.

335 Q. Do I understand you to mean that the part that is said to be carried back in the Hoffman patent in suit for the pur-

pose of permitting the admission of the hand between the rollers is the part C 2 rather than the curved part C 4?

A. Well, in this instance they are both carried back.

Q. As a matter of fact, however, the part which is marked C 4, the curved part, commences to curve back at some distance from the part C 2, which supports the rollers; am I not right (referring to this space here)?

A. Well, if C 2 simply designates one portion of that bar it does. If C 2 means the entire bar—C 2 refers to one portion of the bar and C 4 to another portion of the bar. Now, it would seem to me that wherever C 2 left off C 4 began. There would not be very much distance between them.

Q. Do you find upon Plaintiff's Exhibit "Hine Drawing" a part of the frame curved back corresponding to the curved-back portion C 4 of the frame of the Hoffman patent in suit?

Objected to by counsel for complainants as immaterial.

A. It does not have the same curve as shown in the Hoffman patent.

Q. Does it have any curve?

A. No, sir; there is no curve there.

Q. There is no part of the frame proper in Plaintiff's Exhibit Hine Drawing that curves back, is there?

Objected to by counsel for plaintiff as implying that there is anything but a single frame.

Mr. CHURCH: Mr. Auditor, I must object to the counsel's suggesting anything to the witness under the guise of an objection to evidence. I think if the question is improper a legitimate objection might be urged against it, and I might withdraw it; but I do
336 not see the propriety of counsel suggesting an answer to the witness.

Mr. FOSTER: I suggest, Mr. Auditor, that confusion is likely to arise in the witness' mind which naturally makes it difficult to answer. He is being examined as a patent expert, and he is not competent, and the last question refers to certain parts of frame proper, and that carries an implication which is not based on anything which has been heretofore stated in the case. It is very probable that a witness who is not a patent expert would ignore the meaning of the word "proper" as he has used it, and I have a perfect right under these circumstances, in order to avoid the consequences of any answer that might be given, to put in a proper objection.

Mr. CHURCH: If the auditor please, it seems to me that my brother Foster is trying to have Mr. Hine here for his purposes as an expert and for my purposes not to occupy that relation. He is called here solely for the purpose of undertaking to prove infringement in the use of the plaintiff's patent by the manufacture or sale of what is known here as our new No. 4 shelf, a shelf that was not before the court. He has produced this man, and he has put plaintiff's patent and he has put a drawing of our device in his hands, and he has asked this witness to state whether or not he has found this combi-

nation in the defendants' device, the same question that he would ask a patent expert, in order to establish the question of infringement. Now, when he has used the witness for any such purpose as that I have a perfect right in the first place to examine the witness to show whether he understands what he is talking about, whether he understands that patent, whether he really understands what is
337 enumerated by the claim in that patent, and whether he understands what he is saying when he undertakes to say that the defendants' structure is the same structure, and when he is put on the stand for that purpose I have the same right to cross-examine him on that point as I would have if he were a patent expert.

The AUDITOR: Well, the witness is not put on to testify as a patent expert, his qualification being not that he is a patent expert by education or profession or anything of that kind, but that he is competent to testify simply in the capacity of an expert from his intimate acquaintance with the construction of the machines, whatever they may be, in controversy.

Mr. CHURCH: All testimony of this character is entirely of opinion, and the value of the opinion, of course, must stand or fall upon the weight of the reasons, and I am trying to investigate the reasons for this man's opinion.

Question repeated.

A. No, sir.

Q. Is there any part of the frame that is carried back (referring to the same drawing)?

A. According to my understanding of the word carried there is.

Q. Please point out the parts of the frame that is carried back in Plaintiff's Exhibit Hine Drawing.

A. I would suggest that this part C was carried back, as also this marked C.

Q. In the structure of the Hoffman patent in suit there are forwardly projecting parts of the frame which sustain the front rollers and another part of the frame which is carried back to form a hand hold, is there not?

A. Yes, sir.

Q. In the Plaintiff's Exhibit Hine Drawing do you find
338 parts of the frame which support the front rollers and another part of the frame independent of the supports for the front rollers which is carried back to form a hand hold?

A. I find a frame sufficiently carried back to form a hand hold.

At this point a recess was taken until 2.30 p. m.

After the recess.

Last question repeated.

A. I find the frame carried back. The frame furnishes the support to the rollers.

Q. I ask you if you find in the Plaintiff's Exhibit Hine Drawing a portion of the frame constituting the support for the rollers and another and different portion of the frame carried back to form the

hand hold. I draw the same distinction that the patent does, and I ask you if you find in that structure shown by the "Hine drawing" a portion of the framework which forms the support for the rollers and another and different portion which is carried back to form the hand hold.

Q. There are different pieces; yes; but I should think both pieces are carried back to form the hand hold.

Counsel for defendants offers in evidence a copy of the Hoffman patent 437,833, and requests that the same be marked Defendants' Exhibit "First Hoffman Patent."

Q. I presume you do not sell your roller shelves at a uniform price, do you?

A. We try to; we don't always do it.

Q. The price at which you do sell depends largely upon the amount and character of the competition, does it not?

A. Largely; yes, sir.

Q. And in some instances the reduction in price due to
339 competition leaves an exceedingly small margin of profit, does it not?

A. That is the case.

Q. So you can't say without reference to individual transactions just what the reduction in prices due to competition has been, can you?

A. I can't without specific instances.

Q. Will you name again all the competitors with whom you have conflicted and whose competition has been the means of causing you to reduce prices in respect of your roller shelves?

A. Name all of them?

Q. The principal ones.

A. George D. Barnard & Co., of St. Louis; St. Louis Art Metal Company, St. Louis, Mo.; the Geuder & Paeschke Co., Milwaukee, and the Hoffman-Keefe Office File Co.—this, I understand, is now the same company—and the Office Specialty Manufacturing Company of Rochester, N. Y.

Redirect examination.

By Mr. FOSTER:

Q. You spoke of the hand hold going all the way back to the back part of the frame, if I understand you correctly, in the first part of your examination. Now, what did you mean by that?

Mr. CHURCH: I don't think he quite said that.

Mr. FOSTER: I understand the words he used, but did not understand what he meant by it.

The AUDITOR: I don't think he said that.

The WITNESS: I think the word frame is simply my interpretation of the word carry. I should say this bar was carried
340 back, and that that bar is carried back (indicating), and all of them extend from the front back.

Q. What bars do you refer to when you speak of this bar and that bar, using letters for reference?

A. (Referring to exhibit marked Hoffman patent.) The bars indicated as C 2 and C 1, I should say, or any bar which comes to the front of the roller shelf and extends toward the back. That is my interpretation of the word- carrying back.

Q. I have drawn a dotted line, marked B, upon the Hine drawing, between the brackets C C and ask you whether if the two said brackets C C were continued and bent around so as to follow that dotted line B that would or not alter in any way the operation of that shelf.

A. It would not.

Recross-examination.

By Mr. CHURCH:

Q. Referring to the last question and answer, would or would not the curved bar dotted by Mr. Foster on the Hine drawing affect the construction of that shelf?

A. It would be a different construction.

Q. Would it be a substantially different construction?

A. Simply a difference in detail of construction; that is all. I mean by that it would change the construction of this just as much and perhaps a little more than if you would take out one of those rivets and put in two. It is simply what I would call a minor detail in construction.

Q. Would it improve the construction?

A. If that bar were inserted?

Q. The part of the bar that was dotted on the drawing by Mr. Foster.

341 A. I am inclined to think it would have a tendency to strengthen it.

Q. As a matter of fact, in the construction by plaintiffs of their roller shelves do they or not employ such a curved bar?

A. They do.

Q. Have the plaintiffs always employed such a construction since they began manufacturing the Hoffman patent in suit?

A. We have; yes, sir.

Q. That was the construction patented, as I understand it?

A. We assume that it is covered by a patent; yes, sir.

Q. Do you mean by your last answer to state that the construction now made by the Fenton Company is the same construction as is shown in figure 2 of the Hoffman patent? I am referring to the construction of the frame.

A. Oh, no, sir; it is not the same as that in the construction as shown there.

Q. And prior to February, 1895, what proportion of divided roller shelves that were sold was sold by other parties than the Fenton Company and the Office Specialty Company, so far as you know or can estimate?

A. Well, I should think that the Office Specialty Company and

the Fenton Company sold four-fifths of the roller shelves that were sold prior to that.

Q. Your last answer is given as the result of guesswork on an off-hand estimate, is it not?

A. It is not off-hand, as the matter has been thought of a good deal prior to this, and it is an estimate that was made along in the early part of last year.

342 Q. But it is mere estimate, not founded upon actual figures. You are not prepared to give the actual figures?

A. No; I am not; but the matter has been gone into to this extent, that the various jobs that have been let have been canvassed to see what proportion outside competitors sold as compared with what was called the two leading houses—that is, the Office Specialty Company and the Fenton Company—had sold up to that time, and I recollect that the estimate was four-fifths of the work.

Adjourned subject to notice.

343 MAY 4, 1896—10 a. m.

Hearing pursuant to notice.

Present: Mr. Foster, for the complainant, and Mr. Church, for the defendants.

Counsel for defendants, in answer to the call of counsel for the complainant, here produces a statement prepared under direction of Mr. Carl F. Lomb, showing the new No. 4 roller shelves sold by the Office Specialty Manufacturing Company between June 6, 1893, and September 12, 1893, and the same is marked "Exhibit Memorandum No. 2." He also produces another statement made under Mr. Lomb's direction, showing the number of new No. 4 shelves sold by said defendant company between September 12, 1893, and December 31, 1894, and the same is marked "Exhibit Memorandum No. 3;" also a further statement prepared under Mr. Lomb's direction, showing the number of new No. 4 shelves sold by the defendant company between January 1, 1895, and December 31, 1895, and the same is marked "Exhibit Memorandum No. 4."

CARL F. LOMB recalled.

By Mr. CHURCH:

Q. You were asked in your previous examination to examine Exhibit Memorandum No. 1 and state which of the prices therein indicated were simply guesses and to mark an X opposite each in the price column. Have you done this?

A. Yes, sir; I put an X opposite each one. I think the prices are guesses.

Q. In your previous examination you were asked to state whether the Office Specialty Manufacturing Company or the members thereof were interested directly or indirectly in the firm of Yawman & Irby, and you replied, "No, sir; neither of them." Do you desire that statement to stand as recorded or do you desire any correction of it or amendment to it?

344 A. I wish to state that at that time I did not consider the latter part of the question as to the members. I simply considered the Office Specialty Manufacturing Company, and that company has nothing to do with Yawman & Irby; but both Irby & Yawman are very small stockholders of the Office Specialty Manufacturing Company, and I wish to make this statement in correction of this. I read this statement over yesterday, and I thought maybe that it would be well to make this correction.

Q. Mr. Hine, a witness produced in behalf of the complainant, has testified as follows: "Q. Mr. Lomb has stated that the continuous or long roller shelf would cost about ten per cent. less than the divided roller shelf. What is your opinion on that point?

A. I should place it at from ten to fifteen per cent. My impression is it would be a little more than ten per cent.

Q. What would be the loss of stowage space if instead of having the hand hold in the center the shelf was made long enough to permit the fingers to take hold of the book at the opposite ends? Would you have to have a long shelf in such case?

A. The shelf would necessarily have to be made about two inches longer to do that. That would simply mean one-tenth additional space." State whether or not as a matter of fact you do make the shelves having continuous rollers two inches longer in order that the books held thereupon may be removed by permitting the fingers to take hold of their ends.

A. We make the shelves with straight roller front of the exact size as those made with broken roller fronts.

Q. What provision is made in the case of roller shelves having continuous front rollers for the convenient removal of the books?

345 A. The cases are built so that the front roller shelf is at a position where the end of the flat side of the book rests, and the back of the book is extending sufficiently to be grasped by the hand and removed from the case.

Q. In other words, the shelf is made of such width as that the back of the book will project beyond the front roller. Is that correct?

A. Yes, sir.

Q. And in removing the book this projecting portion of the book is grasped, so there is no occasion for reaching in behind the ends of the book. Do I understand you correctly?

A. Yes, sir.

Q. You have stated in your previous testimony that in, perhaps, 95 per cent. of instances you sell your roller shelves with cases. I wish you would describe clearly the parts that constitute what you term "cases."

A. By the cases I mean the shells into which the shelves are fastened. There are the sides, bottoms, the tops, and the backs. There are also the bases on which these cases rest, and cornices for the trimmings—that is for the appearance—and in many cases the panels to make the cases appear well in a room where the sides are exposed.

Q. Of what materials are these shells, back-, sides, bottoms, cornices, and panels composed?

A. Composed of cold-rolled steel and some of drawn steel—that is, the cornices are of drawn steel—and the panels are arranged with brass mouldings or some kind of brass trimmings.

Q. Can you give a rough estimate of the relative weight of the shelves and of these other parts with which the shelves are associated in making up what you call a case of shelves?

346 A. It is almost impossible for me to give the relative weight, but I rather think that the case weighs more than the shelves that are contained therein.

Q. In the statement that was filed with the auditor by your counsel on the 15th of September, 1893, in respect of which you have been examined by counsel for complainant, it is said that the estimated average cost per shelf of the 24,498 shelves mentioned therein was $1.09. In making that estimate per shelf what did you mean to include—the cost of the shelf alone or of the shelf with its supporting shell or casing?

A. I meant the shelves with cases.

Q. In the same statement there is given an estimated average selling price per shelf, stated to be $1.97 per shelf. State what part or parts was or were referred to in making this estimate of $1.97.

A. The shelves and cases were referred to.

Q. Have you been able to make what you would consider even an approximate estimate of the cost or of the selling price of the shelves that you have made and sold as disassociated from cases?

A. No, sir.

Q. You have produced the bills of Yawman & Irby showing what materials that firm furnished the Office Specialty Manufacturing Company, have you not?

A. Yes, sir.

Q. You have given in your several statements the names of the persons to whom roller shelves have been furnished, have you not?

A. Yes, sir.

Q. And you have endeavored to find out just what the

347 cost of the shelves as separate articles have been, have you not?

A. Yes, sir.

Q. And have also endeavored to ascertain what portion of the selling price of the shelves and cases has been properly attributable to the shelves themselves, have you not?

A. I have.

Q. Have you thrown any obstruction in the way of the complainants in the matter of this accounting that you know of?

A. I have not.

Q. In view of the amount of time and attention you have paid to the matter, do you believe it to be possible for any one to ascertain just what portion of the cost of production of the shelves and cases is chargeable to the shelves themselves?

A. I believe it is impossible.

Q. Do you believe it is possible to ascertain what proportion of

the selling prices of the cases with shelves is properly chargeable to the shelves themselves?

A. I believe it is impossible.

Cross-examination.

By Mr. FOSTER:

Q. In your statement filed by your counsel in this cause September 15, 1893, you give the estimated gross expenses of the business of the Office Specialty Manufacturing Company during the period named as $345,474.87. Am I to understand that this includes all expenses of every kind?

A. Yes, sir.

Q. Am I to understand that Exhibits Memorandums No. 3
348 and No. 4 are correct statements of all the No. 4 shelves sold by your company and its agents during the times indicated in such statements?

A. Yes, sir.

Q. Is any member of the Office Specialty Manufacturing Company, so far as you know, interested in the Yawman & Irby firm or company?

A. Yes, sir.

Q. To what extent?

A. They are small stockholders.

Q. The Yawman & Irby Company is a corporation?

A. No, sir; there is a private partnership and each of them hold a little stock.

Mr. CHURCH: In what?

A. In the Office Specialty Manufacturing Company.

Q. My question was whether any members of the Office Specialty Manufacturing Company are interested in the Yawman & Irby Company.

A. It is the same thing. Mr. Philip Yawman and Gustave Irby are stockholders in the Office Specialty Company.

Q. Any in addition to them?

A. There are no other members of the Office Specialty Company interested in Yawman & Irby Company.

Q. Take the instance of a case of the metallic company's having 125 roller shelves, say five vertical rows of 25 each. So far as you can estimate, what would be the relative proportion of expense of cases and shelves?

A. I do not know.

Q. I know that you do not know positively; at the same time, you and any one else in a manufacturing business could very closely approximate the cost of a metallic case which was of
349 a given size, and you certainly must have some idea of the cost of a case, say 60 inches high and 100 inches wide.

A. I have no idea of the cost of it.

Q. Would such a case having an internal capacity of 60 inches by 100 inches cost more than the 125 shelves which it would contain?

A. I do not think it would cost more.

Q. It would probably cost 15 to 20 per cent. less, would it not, unless there were some ornamental features which increased the cost?

A. I can't say as to that.

Redirect examination.

By Mr. CHURCH:

Q. I show you a copy of the U. S. Patent No. 557,392, granted to the Office Specialty Manufacturing Company as the assignees of M. R. Jewell and P. H. Yawman, dated March 31, 1896, and ask you if the defendant The Office Specialty Manufacturing Company is the present owner of this patent.

A. Yes, sir.

Counsel for complainant objects to the production of the said patent and any evidence given relating thereto, first, as having no bearing upon the case and as being irrelevant and immaterial, and, secondly, as improperly introduced at this stage of the proceedings.

The AUDITOR: The paper may be filed subject to the objection.

Counsel for defendant offers in evidence the copy of the patent referred to, and the same is marked "Defendants' Exhibit Jewell and Yawman New No. 4 Shelf Patent."

Counsel for complainant excepts to the admission of such
350 patent in evidence, and also to the designation given to the exhibit.

Recross-examination.

The witness is cross-examined *de bene esse* in regard to the foregoing exhibit.

By Mr. FOSTER:

Q. Has the Office Specialty Manufacturing Company manufactured any shelves like that shelf in patent No. 557,392?

A. Yes, sir; substantially so.

Q. That is, you are referring to shelves like the new No. 4 shelf that has been introduced?

A. Yes, sir.

Q. The shelves like the new No. 4 shelf exhibit are the only shelves that have been manufactured by the Office Specialty Company that are like the said patent?

A. Yes, sir.

Q. You have not made any shelves precisely like that illustrated in the said patent?

A. I don't think so; and if they were they are included in the report.

Q. But you do not know that they have made such shelf?

A. I do not know.

351 MAY 5, 1896—10 a. m.

Hearing pursuant to adjournment.

Present: Mr. Foster, for the complainant, and Mr. Church, for the defendant.

Mr. Church offers in evidence a certified copy of the file-wrapper and contents in the matter of the Hoffman patent No. 450,124, in suit, and requests that the same be marked "Defendants' Exhibit File-wrapper and Contents of Patent in Suit." He offers this for the purpose of explaining the patent of Hoffman, explaining its scope as determined by the conduct of proceedings in the Patent Office.

Mr. Foster objects to the introduction of the copy of file-wrapper and contents relating to plaintiff's patent at this stage of the proceedings because it is a matter which pertains to the merits of the case, and if it had been desired to produce this matter as evidence it should have been produced before the court at the time that evidence was taken on the subject of infringement under the plaintiff's patent, and, further, because the evidence which it is proposed to introduce by this certified copy is evidence which could as well have been procured when the case was before the court upon its merits.

The auditor reserves his decision.

ALEXANDER S. STEUART, having first been duly sworn, testified as follows:

By Mr. CHURCH:

Q. State your name, your age, residence, and occupation.

A. Alexander S. Steuart; age, 30; my residence is in Maryland, Prince George county; my office, 617 7th street, Washington; I am an attorney-at-law and solicitor of patents and expert in patent causes.

—. ——.

352 A. I have always been deeply interested in mechanical subjects, and since 1882 have been directly engaged in the soliciting of patents and in work connected with patents. During that time I have prepared and prosecuted a large number of applications, made a great many searches involving questions of patentability and the validity of patents, and have testified in a number of suits pending in the U. S. circuit court- on the same subject.

Q. Have you examined and do you understand the mechanical structure shown and described in letters patent No. 437,833, here in suit?

A. I have examined said patent and think that I understand the structure therein shown and described.

Q. What do you find to be the structure shown and described in said patent and particularly referred to in the first claim thereof?

Mr. FOSTER: I object to the question and any answer that the scope of the plaintiff's patent has been decided by the court and may

be given thereto because complainant's expert has already testified as to the construction of the patent in the testimony taken in the case before the court.

A. Generally speaking, the structure described in the patent is what is now known as a roller shelf—that is to say, a shelf adapted to receive heavy books and like articles, which is proviced with rollers to facilitate the introduction and withdrawal of the book, and the particular construction of shelf described in patent is a shelf made of metal band iron, with the rollers journaled in suitable bearings in the flat sides of the band, one portion of the frame itself being bent backward between the two foremost rollers to form a hand hold. These front rollers are so arranged as to project
353 above and in front of the rack or shelf frame on each side of the hand hold or recess or re-entrant band at the central portion. In the first claim the shelf is described as composed of metallic strips having a re-entrant bend or recess in its front edge and rollers journaled in said rack and projecting above and in front of the same on each side of the bend or recess. The elements specified particularly in the claim, I take it, are the formation of the framing with the re-entrant bend or recess and the particular arrangement of the rollers with reference to said re-entrant bend or recess and the frame.

Q. Will you please examine the drawing marked in this case "Plaintiff's Exhibit Hine Drawing," and state what you find it to illustrate? (Hands witness drawing.)

A. This drawing apparently illustrates a roller shelf having a metallic frame, with a substantially straight front bar, intermediate and rear rollers for facilitating the movement of the book or object placed on the shelf, and in addition it is provided with two brackets at the front edge, which support rollers between their arms.

Q. Please compare the structure of Plaintiff's Exhibit Hine Drawing with the structure shown in the plaintiff's patent No. 250,124, and particularly claimed in the first claim thereof, and state the result of such comparison, pointing out any similarities or differences that you may find to exist.

A. Among the elements called for in the first claim of the patent I find a shelf composed of metallic strips having a re-entrant bend or recess in its front edge. On looking at the Hine drawing referred to in the previous question I find that the frame of the shelf is composed of metallic strips, but the front bar of the said
354 frame is a straight bar, and has no re-entrant bend at all. I find further that the claim calls for, among other elements, rollers journaled in the said rack and projecting above and in front of the same on each side of said bend or recess. The rack referred to, I take it, must mean the metallic frame previously mentioned in the claim, and the rollers are specified as journaled in the front of the same. I do not find in the Hine drawing that the rollers at the front are journaled in the metallic frame, but, on the contrary, are journaled in brackets separate and independent therefrom, but attached to the front of said frame. In these respects I think the

structure differs very essentially in its elements from the elements enumerated in the first claim.

Q. Please again look at the Hoffman patent in suit and state what you find to be the structure shown and described therein and particularly referred to in the second claim thereof.

A. The second claim calls for in its elements a supporting frame, a series of horizontal rollers, the front roller in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections. The frame referred to must be a frame in which not only is the intermediate part carried back, but it must be capable of being carried back. In other words, the structure must be one in which the framing, by which I mean the framing of the body of the shelf, is formed with a portion which is carried back between the two sections of the front roller so as to permit of the introduction of the hand between said sections.

355 Q. Please compare the structure shown in Plaintiff's Exhibit Hine Drawing with what you find to be the structure shown and described in the Hoffman patent and particularly referred to in the second claim thereof.

A. As previously stated by me, the structure apparently shown in the Hine drawing is a roller shelf in which the framing has a straight front bar, and no portion of this front bar or of the framing is carried back to permit of the introduction of the hand in the manner specified in the second claim. There is a series of horizontal rollers, but the two front rollers are in every way distinct and separate and are mounted in independent brackets attached to the front of the shelf, and hence there is no need of carrying the body of the front backward at any point between said rollers.

Q. Assuming that the court shall construe the first claim of the Hoffman patent to be limited to a structure in which a portion of the main framing is bent or curved back so as to produce a recess between the front rollers and serving as a hand hold, does or does not, in your opinion, the shelf shown in Plaintiff's Exhibit Hine Drawing exhibit such a structure?

A. It does not.

Q. Assuming that the second claim of the Hoffman patent in suit shall be construed by the court as limited to a structure in which the front bar of the frame is curved or carried back to permit the admission of the hand between the two roller sections, does or does not Plaintiff's Exhibit Hine Drawing show such a structure?

A. It does not.

Q. Please examine the Hoffman patent No. 437,833, granted
356 October 7, 1890, prior to the date of the Hoffman patent in suit, and state whether you understand the structure shown and described therein.

Objected to by counsel for plaintiff as introducing new matter for the purpose of having the expert witness construe plaintiff's patent.

Counsel for defendant- states that this patent now shown the witness is one of the patents presented to Judge Cox on an application

made for leave to introduce supplemental proofs in this cause, which Judge Cox expressly reserved for consideration at the final hearing.

Auditor's decision reserved.

A. I have examined said patent and believe that I understand the structure therein shown and described.

Q. Assuming that the first claim of the Hoffman patent in suit shall be construed by the court as not limited to a structure having a front bar bent or curved back substantially as shown in the drawings of said Hoffman patent in suit, but construed broad enough to cover any roller shelf having separated front rollers with a recess between them to afford an opportunity for the insertion of the hand, does or does not the Hoffman patent No. 437,833 exhibit a structure falling within the terms of said claim?

A. Under such a construction of the claim the structure shown in the earlier Hoffman patent, No. 437,833 would clearly fall within it.

Q. I ask you the same question as to a comparison of said claim thus construed with the structure shown and described in Exhibit A, Adams patent No. 338,459, in evidence in this suit.

357 Objected to by counsel for plaintiff, as the experts on behalf of the defendants as well as the complainant testified in the suit fully regarding the Adams patent, which was before the court at the time that the court made the decree in the case, and it is manifestly improper that any attempt should be made to secure it here.

Auditor's decision reserved.

A. Under the construction assumed in your question I am clearly of the opinion that the structure shown in the Adams patent would fall within it.

Q. Assuming that the second claim of the Hoffman patent in suit shall be construed as not limited to a structure in which the front bar of the frame is bent or carried back substantially as shown in the drawings of said Hoffman patent in suit, but to be broad enough to cover any shelf having separated front rollers with a hand hold between them, does or does not the prior Hoffman patent, No. 437,833, exhibit the structure covered by said claim?

A. I am clearly of the opinion that it does.

Q. The same question as to a comparison of the subject-matter of the second claim of the Hoffman patent in suit as thus construed with the Adams patent, No. 338,459?

A. I am clearly of the opinion that the structure shown in this Adams patent would fall within such a construction of the second claim.

Q. Please examine letters patent No. 557,392, now shown you, being Defendants' Exhibit Jewell & Yawman's New No. 4 Shelf Patent, and state whether or not you understand the structure shown and described in said patent.

Counsel for plaintiff objects to the question as irrelevant and im-

material and to the patent as improperly introduced at this time.

358 Auditor's decision reserved.

A. I have examined said patent and believe that I understand the structure therein shown and described.

Q. Please compare the structure shown and described in the Hoffman patent in suit and particularly claimed in the first claim of said patent with the device shown in this Jewell & Yawman patent No. 557,392 and point out any similarities or differences that you may find to exist.

A. In the Jewell & Yawman patent I find illustrated and described a roller shelf with a metallic frame bound with a straight or substantially straight front bar, the ends of which are bent backward to form the ends of the frame, with intermediate and rear rollers, and to the front portion of the frame outside of the front bar I find attached two independent and separate brackets, described in the patent as substantially U-shape, and having journaled in them front rollers lettered C in the drawings. This structure differs from the structure shown and described in the Hoffman patent here in suit in that the front bar or frame has no re-entrant portion arranged centrally thereof, nor is the frame bent backward at all to form a hand hold. The same differences exist between the elements of this structure and the elements of the structure called for in the first claim, as previously pointed out by me in connection with the Hine drawing—that is to say, I find no frame constructed of metallic strips and having a re-entrant bend or recess in its front edge. Neither do I find rollers journaled in said rack and projecting above or in front of the same. On the contrary, the front bar of the frame is straight and the front rollers are journaled in brackets made separate therefrom, but attached to the front bar.

359 Q. Please compare the structure shown and described in the Hoffman patent in suit, and particularly referred to in the second claim thereof, with the structure shown and described in said Jewell & Yawman's patent, No. 557,392, pointing out any differences or similarities that you may find to exist.

A. The same differences exist in this instance as pointed out by me in connection with the Hine sketch—that is to say, I find no frame in the Jewell & Yawman structure having an intermediate part carried back to permit the admission of the hand; and the rollers are, as I have just mentioned, journaled in separate and independent brackets attached to the frame.

Q. Assuming that the court shall construe the first claim of the Hoffman patent in suit to be limited to a structure in which there is a re-entrant bend formed in the front bar of the shelf frame, does or does not the structure of the Jewell & Yawman patent, No. 557,392, fall within said claim so construed?

A. In my opinion it clearly does not, because in the structure shown in the Jewell & Yawman patent the frame of the shelf has a substantially straight front bar, the frame, in fact, being rectangular in shape, and, instead of rollers journaled in the frame and project-

ing forward of such re-entrant bend, the front rollers are journaled in separate and independent brackets which are attached to the front of said substantially straight front bar.

At this point a recess was taken until 1.30 p. m.

360 After the recess.

Q. Assuming that the court shall construe the second claim of the Hoffman patent in suit to be limited to a structure in which the main frame of the shelf is curved or carried back so as to form a hand hold substantially like that shown in the drawing — the patent in suit, would or would not, in your opinion, the structure shown in the Jewell & Yawman patent, No. 557,392, fall within said claim?

A. It would not, because such structure shown in the Jewell & Yawman patent fails to embody the front bar bent or curved back to form a hand hold.

Q. Will you please compare the structure shown and described in the Jewell & Yawman patent, No. 557,392, with the structure shown in Plaintiff's Exhibit Hine Drawing, and state whether or not, in your opinion, they are alike or different, and give your reasons for any opinion you express?

A. I find that they are substantially alike in so far as the front bar is concerned and the two independent brackets connected to said front bar and having rollers journaled in them. There is a slight difference in the bracing and mode of forming the body of the frame, such difference being mainly incident to the employment of a central brace for strengthening the shelf at the center portion. This necessitates the dividing of the central roller into two portions. The rear bar within the real roller in the Hine drawing is bent inwardly at the center, or does not run parallel with the rollers, as does the corresponding bar in the patent. These differences, however, are quite immaterial in so far as the construction of the rectangular frame itself is concerned. I notice, too, that in the

361 patent the front bar has its ends bent back to form the ends of the foller shelf, but in the sketch the ends are riveted to the front bar.

Counsel for defendant- offers in evidence the copy of the Hoffman patent No. 437,833 referred to by the witness in his examination and requests that the same be marked "Defendants' Exhibit Hoffman's Prior Patent No. 437,833."

Objected to by Mr. Foster as irrelevant and immaterial and improperly introduced.

Counsel for the defendant- offers in evidence a copy of the opinion of Judge Lacombe filed in the case of Fenton Metallic Manufacturing Company *v.* Samuel W. Chase and others in the U. S. circuit court for the southern district of New York, March 31, 1896, and requests that the same be marked "Defendants' Exhibit Judge Lacombe's Opinion."

Objected to by Mr. Foster as irrelevant, immaterial, and improperly introduced at this time.

Q. Are you familiar with the structures put out by defendants in this cause containing roller shelves? If yea, will you please describe such structures somewhat in detail?

A. I am somewhat familiar with the structures manufactured by the defendants now on the market, having examined a number of them, and I find them usually to consist of a casing of framing made of heavy sheet metal in which the roller shelves are mounted, usually by means of screws passing through the ends of the shelves into the casing, and in connection with such roller shelves there are usually files and drawers or compartments occupying a portion of the space within the outer casing or frame, and when such casing or framing is intended to be exposed to view at the ends, after the manner of a book-case, ornamental panels are applied to the
362 ends, and suitable ornamentation or a cornice is applied to the top to present a pleasing and effective appearance. The casing or frame, as I have termed it, is the outer shell, as it were, which is usually made in sections, and such sections unite when the article or complete device is set up for use, the casing in this respect being generally like an ordinary book-case minus the shelves—that is to say, that a portion of it resembles a book-case without the shelves.

Q. Has this casing that you refer to a back or not?

A. It has usually a sheet-metal back and sheet-metal sides, a sheet-metal top and bottom, the ornamental panels or finishing portion that I before referred to being used when applied to the outside of this sheet-metal casing.

Hearing adjourned to May 6, 1896, at 10 a. m.

363 MAY 6, 1896—10 a. m.

Hearing pursuant to adjournment.

Present: Mr. Foster, for the complainant, and Mr. Church, for the defendant-.

ALEXANDER S. STUART recalled.

Cross-examination.

By Mr. FOSTER:

Counsel for plaintiff states that the cross-examination of this witness is *de bene esse* so far as concerns matters objected to in the direct examination.

Q. Referring to Jewell & Yawman's patent, 557,392, if each of the front rollers was journaled at one end in one of the projecting side pieces of the frame and was pivoted at the inner end in a bracket attached to the other portion of the frame would or would not that be a construction within the claim of that patent?

Objected to by Mr. Church as calling upon the witness to construe the claim, which is not within his province.

Counsel for plaintiff states that he is not calling for a legal construction of the claim, but is asking the witness whether as a me

chanical expert he finds that the mechanical construction specified is described by the claim of patent and embodies the features set forth in that claim, which is the express purpose of an expert in a patent case.

The AUDITOR: The question may be answered subject to the objection.

A. The claim of the Jewell and Yawman patent, which, I understand, is the claim to which you refer, reads as follows: "As a new article of manufacture a portable book shelf consisting of a rigid frame having one or more rear rollers and a continuous
364 bar across the front, from end to end, the U-shape brackets containing rollers and attached to the front of said front bar, the said brackets being separated to permit the introduction of the hand between them" The hypothetical structure which you have asked me regarding you have not clearly described, but I assume that it does not have the elements set forth in this claim, to wit, the brackets in which the rollers are journaled.

Q. Would you find that the claim of patent 557,392 described a roller shelf in which a series of rollers were supported by a frame with the two front roller sections supported by independent ears extending from the front bar of the shelf?

Objected to by Mr. Church on the same ground.

A. The structure which you describe is not clear to me at all, but I should say that it would not have the elements called for in terms in the claim.

Q. Have you examined and do you fully understand the letters patent to Jewell & Yawman, No. 557,392?

A. I have examined said patent, and think that I understand the structure shown and described therein.

Q. Will you state what the dotted lines represent in the drawing of that patent near the letter A^1?

A. A careful reading of the specification of the patent does not show that anything is stated in regard to these dotted lines, and hence it is not clear from the patent or from the drawing of what they are intended to represent.

Q. Then you do not know what they represent?

A. I do not.

Q. Now, what are the two parts which are on the cross-bar A^2, one of which is just above the letter C^4, at the left?

365 A. I would make the same answer in regard to these projections or apparent enlargements on the framing.

Q. What does the patent state as to the connection between what are called the brackets C^4 and the remaining portion of the frame?

A. The specification at the bottom of the first column states, "Attached to the front side of the bar A^1 are two U-shaped brackets," and further along, line 58, it states, "The brackets containing the rollers, being each complete, may be applied at such distance apart on the front bar as will form the proper hand hold or space between them."

Q. Then the patent does not state what the connection is to be between the brackets and the other portion of the frame, does it?

A. I do not find it stated.

Q. Assuming that the frame was of brass or a composition, and that these brackets were soldered, or that the frame was of iron and these brackets were soldered to the remaining portion of the frame by the electric welding process, would or would not the structure in such case be the structure described in the patent? I am assuming that all the remaining portions are the same as illustrated in this patent.

A. I should say that it is entirely immaterial how they were fastened and placed, so far as this patent is concerned.

Q. That is, regardless of the method of fastening, if the parts were of the same shape and relation as shown in the drawing, such a structure would be the structure set forth in the patent?

A. Assuming that the same method of fastening was employed, I think so.

366 Q. Then if the frame was cast all in one piece of cast metal and was of precisely the same shape shown in the drawing and rollers were arranged in the same way, that construction would be the construction set forth in the patent, wouldn't it?

A. It would not embody the elements combined, as stated in the claim.

Q. Why not? You have stated that, provided the brackets are fastened to the other part of the frame in some way, the structure would be within the terms of the patent or would be the structure set forth in the patent, and now what does it matter whether the brackets are cast to the other portion of that frame or electrically welded; what difference does it make?.

A. I have not stated just what you say, as I stated that with the assumption that some method of fastening was employed. In the claim I find a U-shape bracket is called for attached to the front of said bar, which, I take it, implies that at some time they were separate therefrom.

Q. Then, as I understand you, if some other party should make a roller shelf exactly like that set forth and shown in patent 557,392, except that the frame was cast all in one piece, you would not, as an expert, find that such a construction was the construction set forth in said patent; am I right?

Objected to by Mr. Church as an improper mode of cross-examination, the question calling upon the witness to assume or find a construction of the patent.

The AUDITOR: The objection will stand and the question can be answered.

A. There are a great many considerations which would have to be taken into account in construing a patent in connect*nection*

367 with any specific device, and it would be almost impossible off-hand to say whether a specific device would infringe a patent or embody all the elements of the claim in substantially the way set forth in the patent without such consideration.

Q. Your answer assumes what is not at all in my question. I have not asked you to construe the patent or determine the matter of infringement, and I have submitted to you a hypothetical construction which you certainly must understand, and I ask you again whether if the construction set forth and illustrated in the said patent was precisely as is shown and described, except that the whole frame was of cast metal, whether or not you would find that that construction was not a construction described in the patent.

A. With this understanding of the question I would state that I find no such construction described in the patent at all.

Q. And therefore, as I understand you, the said patent 557,392 describes and sets forth in the claim as the invention of the patentees a shelf in which one of the features consists of brackets supporting the front rollers, each of said brackets consisting of a part which has at one time been separate from but is connected by some mechanical connecting means to the other part of the frame of the shelf. Am I right?

Objected to by Mr. Church on the ground that it is asking the witness to construe the patent, which it is not his province to do.

The AUDITOR: The question may be answered subject to the objection.

368 A. This is the construction described in the specification, and the claim states, "The U-shape brackets containing rollers and attached to the front," etc.

Q. My question is whether I am right?

A. To this extent I think you are right.

Q. What is the purpose or object of the frame in the roller shelf?

A. Primarily to support the articles placed on the shelf.

Q. Does the frame in a roller shelf support the articles or do the rollers support the articles?

A. Both.

Q. Do you mean to say that the articles rest upon the frame?

A. The articles rest upon the rollers and the rollers rest upon the frame.

Q. And the particular object of the frame is to support the rollers that support the articles?

A. That is one of the principal objects.

Q. What other object has the frame?

A. As ordinarily used, the frame braces the structure in which it is mounted; that is the principal other object of the frame.

Q. Have you ever heard any one refer to the frame of a roller shelf as having the object brace the structure to which it is applied?

A. This is obvious.

Q. But you have never heard any one refer to it for that purpose?

A. In terms, no; I don't think I have.

Q. So far as the support of the rollers is concerned in a roller
369 shelf, is the particular construction of the frame material?

A. It is not.

Q. And it is common, I understand, to make the frames of different

pieces, riveted or otherwise secured together; sometimes more and sometimes less number of pieces?

A. That is so.

Q. Now, if the frame of the structure shown in patent 557,392 or the frame of the structure shown in Complainant's Exhibit "Hansmen's Sketch," which I assume you are familiar — and which I now show you, or the frame of figure 17, Office Specialty Manufacturing Company Catalogue exhibit, which I now show you, instead of being made of pieces of metal riveted together was each of them made in one piece of cast metal, would not the structure perform precisely the same functions in precisely the same way when applied to the support of books?

A. I think there would be a difference in the strength of the respective structures if made in this way; but, in so far as the functions of carrying the books on the rollers are concerned, assuming that the rollers are mounted as shown in the respective structures and allowing them to be inserted or withdrawn, the functions would be apparently about the same.

Q. If I should take any one of the structures referred to in the last question and remove all the rollers from that structure, what part would remain?

A. The casting.

Q. If I should take all of the rollers from any one of the shelves made as shown in Plaintiff's Exhibit Hine Drawing, now shown you, and in figure 17, Office Specialty Manufacturing Company catalogue, and in patent 557,392 and in Exhibit Hansman's Sketch, what part would remain?

370 A. The fixed parts of the shelf, namely, those parts which are rigidly attached together and not adapted to move with relation to each other.

Q. Well, what do you call that part of the shelf; what is the ordinary name applied to it?

A. I find in the literature before me that that part of it in some of the structures would be called the shelf frame and in other of the structures partly shelf frame and partly brackets.

Q. I am asking you what you would call that part that remained after the rollers were taken away, what name — would give it.

A. In the Hine sketch and in the patent 557,392 I would call that portion of the structure left, which is substantially rectangular, the frame, and the portion projecting in front of it the brackets. In the structure shown in figure 17 very little else than the frame would be left, unless we should term the support for the inner ends of the rollers a bracket, and the same with reference to the Hansman's sketch.

Q. You do not answer my question. I am not asking you to dis-ect the parts and tell what the different parts might be called. I will now put the question in a different way—that is, in the form of a statement—which you can correct if you do not consider it right. My statement is that every roller shelf consists gen-

erally of two parts, the rollers and the frame. Am I right or wrong?

A. Generally speaking, I think you are right.

Q. So that when I take the rollers out of the roller shelf the frame is left?

A. That is so ordinarily, I think.

371 Q. And the main and practical and sole object of a frame in a roller shelf is to support the rollers; isn't that so?

A. As I before stated, this seems to be the primary object.

Q. And any two frames which support the rollers in the same position in respect to each other would, to that extent, be substantially alike, would they not, regardless of the particular method in which the parts of the frames might be riveted together?

A. Your question is too general; it is impossible to answer.

Q. In comparing some of the structures referred to in your direct examination you pointed out slight differences in the bracing and modes of forming the frame. Where the differences between two frames are simply differences in the bracing and mode of forming do you consider such differences to be material, provided the rollers are supported in substantially the same way and the books can be placed upon and removed from the shelves in the same way?

Objected to by Mr. Church as entirely too indefinite, not presenting to the witness specific structures for comparison.

Counsel for complainant says that his object in asking this question is to get an understanding as to what the witness considers to be material differences between structures where the same results are secured.

Counsel for defendant replies that if that is the object it is the duty of the counsel to present the specific structures in respect to which he wishes the opinion expressed.

Objection overruled.

A. I believe that I stated that certain specific conditions in
372 the construction of structures compared by me were material. I adhere to that opinion, but whether other differences of construction will be material, which I do not now have in mind, I am not prepared to say.

Q. Referring to claim 2 of the Hoffman patent sued upon, do you understand that a book shelf that did not have, among other features, "a series of" horizontal rollers would be the shelf described in said claim?

Objected to by Mr. Church as calling for a construction of the claim.

A. It would certainly not embody the elements called for by the claim.

Q. I find that the claim of patent 557,392 calls for brackets separated. Have you any understanding of the object in separating the brackets in the structure of said patent?

A. The object is stated in the claim.

Q. What do you understand the object to be?

A. To permit the introduction of the hand between them.

Q. I understand that in your opinion the claim of patent 557,392 described a structure one of the features of which is that there are two brackets, each supporting a roller placed in separating positions upon the front bar. Do you find that the patent ascribes any advantage or utility from this particular construction and mode of separating the rollers?

A. One of the objects stated in the specification is to produce a shelf which may be easily constructed and which shall possess strength, and among statements of the elements described as particularly strong is "a strong cross-bar extending continuously
373 from one end to the other." This, I think, is an advantage, in so far as the construction of the front bar in concerned. The brackets are mounted on this front bar, and are consequently strongly supported; and, as a further advantage, I find in lines 59 and 60 that the brackets may be placed at such a distance apart on the front bar as will form a proper space between them, showing that they may be placed at different distances apart, and as incident to this it is obvious that such brackets may be made up and the same sized brackets used in all sized shelves.

Q. Referring to Exhibit Hansman's Sketch, I suppose that you will admit that the frame in that case possesses strength and is self-sustaining?

A. It apparently represents a shelf which has these features.

Q. And also that it has a strong cross-bar extending continuously from one end to the other, being the front bar?

A. It apparently has two such bars located at an intermediate point in the frame.

Q. Please point out which is the other bar you refer to beside the bar *b*?

A. I refer to the back bar, the two ends of which are set at an angle to the rear roller.

Q. And in the construction of the Hansman's sketch there are brackets *a a*, which may be set at different distances apart upon the front bars, are there not?

A. Not with the construction of shelf shown.

Q. Why not? If the brackets C^4 in the construction of No. 557,392 may be set at any point on the front bar a^1 and riveted at that point, why cannot the brackets *a a* in Exhibit Hansman's Sketch also be set at any point upon the front bar and riveted at those points?

374 A. It is perfectly obvious from an inspection of the two drawings that if the brackets *a a* referred to in the Hansman's sketch were set further apart it would have to be done with no roller present, or at least with different rollers from those shown, and if they were set closer together the rollers would drop out. This is not so at all with the Jewell and Yawman structure, where the rollers are mounted in brackets, or rather each roller is mounted in a bracket, which bracket has the bearings for both sides of the roller.

Q. You know very well, do you not, that it would be utterly im-

possible to rivet the brackets to the front bar in making the structure of patent 557,392 if the rollers were in the brackets at the time the riveting took place, and that in making all of these structures the frame is first made by riveting all the parts together, and then the rollers are put in place?

A. I do not know anything of the kind, for such is not the fact. It is entirely possible to rivet those brackets in place when the rollers are mounted therein.

Q. You state that you have been engaged in the patent practice; I suppose that you will admit that it is a constant practice to grant letters patent for subordinate features the use of which would infringe broad patents already granted?

Objected to by Mr. Church as not calling for expert opinion and as foreign to the direct examination.

Question withdrawn.

Q. Referring now to the Hoffman patent in suit, does the second claim of that patent call for any particular construction of frame except that the intermediate part between the rollers shall be carried back?

A. This limitation to a frame with the intermediate part
375 of the frame being carried back seems to be the only limitation in terms to the construction of the frame.

Q. What do you understand to be the object of carrying back the part of the frame between the front rollers?

A. I understand its object to be to permit the hand to be thrust into the frame, as it were, so as to grasp an object lying upon the frame and projecting over the opening.

Q. And that result would be as well secured if the frame was all cast in one piece of cast metal as if it was made up of separate pieces, wouldn't it?

A. That particular result, if the frame were properly cast, would.

Q. The frame carried back means carried back of what?

A. Back of the front part of the frame and rollers mounted in said front part of the frame, I should judge.

Q. With what object?

A. To permit the hand to be thrust into the frame, as I have just stated.

Q. That is, to permit the hand to pass back of the rollers?

A. And front part of the frame; yes.

Q. If the hand can pass back of the rollers, the object of the construction is accomplished regardless of where the front part of the frame may be; that is the case, is it not?

A. I do not take it so, entirely.

Q. Well, if that is not the fact, point out where I am in error.

A. The object of the structure recited in the claim is to produce a shelf of a particular structure, in which the frame shall be carried back at the center portion, as set forth, with a view to per-
376 mitting the hand to be inserted, and it is entirely possible that the hand might go back of the rollers without accom-

plishing the object of the structure; for instance, should the book go back of the front rollers with the recess in the frame extending well into the frame it could still be grasped, but otherwise not.

Q. I am not asking you to give a construction to the patent. My question was limited simply to one point—that is, assuming that the rollers are separated and that there is a space between them into which the hand can pass, would not such a structure secure the advantages of the structure specified in claim 2 of the patent in suit regardless of the other particular arrangement of the front portion of the frame at the sides of the intermediate opening? The question is whether that would not secure the same advantages regardless of how the other part of the frame might be made.

A. The hypothetical structure, as I understand it, is the same as shown in the Hoffman patent, omitting the front portion of the frame, having the re-entrant bend therein, and so far as the handling of the books is concerned I should say the advantages would be the same.

Q. So you admit that it is not necessary to have a bar with a re-entrant bend in order to secure the advantages of the structure described in claim 2; is that so?

A. In so far as those advantages are described with relation to the handling of the books, I should say so.

Q. If I have understood your direct testimony, it is to the effect that the construction described in Hoffman's patent and in claims 1 and 2 thereof is one in which the frame of necessity must have a front bar, one portion of which is bent back of the remaining
377 portion so as to form a re-entrant bend, and that unless a frame has a front bar so bent back it is not the construction set forth in claim 2. Am I right?

A. This is the specific structure called for apparently in claim 1, but claim 2 does not specify a front bar, but simply that the intermediate portion of the frame shall be carried back. It is entirely possible that a structure might answer the terms of the second claim that did not have the specific element that you have asked in your question, to wit, a front bar having a re-entrant band.

Q. Then, referring to claim 1, am I right in understanding your direct testimony to be to the effect that if a lower shelf did not have a frame with a front bar, a portion of which between the front rollers is bent back or inward, the said shelf would not be the shelf described by that claim?

A. It depends somewhat upon what you mean by front bar. I think we are liable to have a little confusion in respect to that, because the claim calls for a shelf composed of metallic strips and having a re-entrant bend or recess in its front edge, and hence the front portion of the shelf might not be wholly composed of a single front bar. In fact, in the patent drawings there is no bar which extends clear across the front, but the center bar of the front of the frame is made of a strip, and in this central portion of the front of the frame we find the re-entrant bend or recess.

Q. In your direct testimony you stated your understanding of the meaning of claims 1 and 2 of the patent sued upon. I will ask

you to examine the construction shown in the Exhibit Hansman's Sketch and state whether the said claims 1 and 2, so far as they describe a roller shelf, describe the shelf of the said Hansman's sketch.

A. In the Hansman's sketch I find a construction of shelf
378 in which the side bars of the frame are extended to the front edge of the whole shelf and front rollers are journaled at one end in this side bar and at the opposite end in brackets attached to the frame or a cross-bar of the frame at an intermediate point. The first claim calls for an element, a shelf composed of metallic strips and having a re-entrant bend or recess in its front edge, and in my opinion this Hansman's sketch hardly falls within such a definition. In claim 2 of the patent I find a construction called for in which the intermediate part of the frame is carried back, and assuming that the brackets in the Hansman's sketch lettered *a a* are not a part of the frame as specified in this claim, I think it is doubtful if this is within the terms of the second claim.

Q. You are aware of the fact, however, that the court in this case in granting an injunction stated that the construction of Exhibit Hansman's Sketch was an infringement of this claim, are you not?

A. I have heard it so stated here this morning.

Q. And you intend to state that you do not agree with the court, as I understand?

A. So far as that part of the opinion I have expressed is concerned, yes.

At this point a recess was taken until 1.30 p. m.

After recess.

Q. Referring to the Adams patent, 338,459, I assume that you will admit in that structure the spring-supported rollers *b* are supported by the front bar B, forming part of the case, while the book-supporting rollers D are supported upon two bars which are adjustable upon the bars B B of the case; am I correct?

379 A. While the book-supporting bars having the rollers thereon are described as adjustable, it is stated that when adjusted they are secured in place by screws *n*. These screws *n* are apparently put in place before the casing is entirely set up, and the whole structure, including the bars *a* and their supports B, form the book shelf. The brackets in which the separated rollers are mounted are secured to the front one of these supporting bars B. How the bars B are of themselves supported is not shown in the patent.

Q. You have made some statements, but do not answer my question. Are the statements in my question correct or are they not? (Question repeated.)

A. I do not find any reason for assuming that the bars B form any more a permanent part of the case than a permanent part of the shelf or book support, and to this extent I think your statement is wrong.

Q. Would not any skilled mechanic examining figures 1, 2, and 3 of the Adams drawing understand that the parts B B are connected

with the part which forms the shell of the case, and if they were not connected what would support them?

A. Any mechanic examining said drawings would, of course, assume that the bars B B were connected to and supported by the case, just as they would any shelf shown in a case.

Q. Now, if the rollers and the parts with which they are connected were taken away from the case, would you then have detached from the case any single structure embodying a rigid frame supporting all the rollers which go to make up the roller shelf?

A. Such a structure is shown in figures 1 and 2, and I take it that you would.

380 Q. How could the frame be rigid in such case, assuming as you do that the long bars which are broken away in figure 2 constitute a part of the frame of the shelf, if the two parallel bars supporting the rollers D D were secured by screws *n*? In such case the parts of the frame, I assume, would not be rigidly connected together, or would be liable to have a certain play if pressure was brought upon either of the bars B B to push it longitudinally. Am I correct?

A. It would depend entirely upon how tightly the screws were put in and whether provision were made to present such wabbling motion. I find shown in figure 3 of the patent a pin, *e*, apparently lettered *c* in figure 1, which, however, would in the structure illustrated prevent such motion.

Q. Then am I to understand that it is your opinion that in the structure of the Adams patent, 338,459, the shelf consists of the parts B B, together with the connecting strips and rollers D and B? Is the whole entire structure to be constructed for application to cases?

A. In my opinion it is capable of being so constructed.

Q. (Question repeated.) I want to know what in your opinion constitutes the shelf itself as a shelf, not what might be done.

A. The parts referred to together with the intermediate connections constitute the book support or shelf in its entirety.

Q. Specify the parts of the rigid frame of that shelf as a shelf.

A. The bars B B with the connecting pieces *a* constitute what I should judge to be a rigid frame for the shelf.

Q. Have you ever practically been engaged in the practical manufacture of roller shelves or of any other mechanical structure?

A. I have never been personally engaged in such manufacture.

381 Redirect examination.

By Mr. CHURCH:

Q. Do you find shown or described in the Hoffman patent in suit any structure embodying the idea of a shelf composed of metallic strips with a re-entrant bend or recess in its front edge or any shelf in which the intermediate part of the frame between the separated front roller sections is carried back different from the structure illustrated in figure 2 of the Hoffman patent?

Objected to by Mr. Foster as incompetent and immaterial, the

testimony as to the scope of the plaintiff's patent having practically been closed before this case came to the auditor.

A. I do not.

Q. In the first claim of the Hoffman patent in suit the rollers referred to therein are described as being journaled in the rack or shelf and projecting above and in front of the same. Do you or not discover in the Exhibit Hine Drawing any rollers thus positioned?

A. I do not find any re-entrant bend or recess in said Hine drawing, and hence in relation to such bend or recess the rollers cannot be positioned, but there are rollers journaled in brackets in front of the shelf, and I assume their upper portions must extend above the level of the shelf framing.

Q. State whether or not the Hine drawing shows that the front rollers extend above the roller shelf.

A. It does not.

Q. You were asked whether or not the shelf illustrated in figure 17 of Complainant's Exhibit Office Specialty Manufacturing
382 Company's Catalogue did not exhibit a roller shelf having the same function of supporting the book or other object placed upon it as the roller shelf shown, described, and claimed in the Hoffman patent in suit. I now ask you if the same is not also true of the structure shown in figure 17 of the same catalogue, wherein there is a continuous front roller extending from end to end of the shelf, instead of a divided front roller.

A. It is, so far as this function is concerned.

Q. What change in the structure of shelf shown in figure 16 of said catalogue would be required to convert it into a shelf such as shown in Plaintiff's Exhibit Hine Drawing?

Objected to by Mr. Foster as irrelevant and immaterial and incompetent at this stage of the proceeding.

A. The omission of the long front roller with its bearings and the substitution of the two brackets which are attached to the front bar and have the rollers journaled therein.

Recross-examination.

By Mr. FOSTER:

Q. State whether or not the roller-supporting structure in the Exhibit Hine Drawing is of such a character that there is a recess intermediate the front rollers for the passage of the hand back of the rollers?

A. There is a space between the brackets in which the front rollers are mounted, if this is what you mean.

Q. And that space permits the passage of the hand back of the front rollers, does it not?

A. It does.

Hearing adjourned to Friday, the 8th instant, at 2 p. m.

383 FENTON METALLIC MANUFACTURING CO.
vs.
OFFICE SPECIALTY MANUFACTURING CO.

MAY 20, 1896.

Hearing pursuant to notice.

Present: Mr. Foster, for complainants; Mr. Church, for defendants.

JAMES W. HINE.

Q. Are you the James W. Hine who has heretofore testified in this case?

A. Yes.

Q. State whether or not you have any exact knowledge as to the cost of manufacturing roller shelves and cases for roller shelves such as are made by the Fenton Metallic Manufacturing Co. and by the Office Specialty Manufacturing Co. and as are illustrated in the catalogue of the said companies.

(Objected to as indefinite and as calling for testimony of too general a character to be available on this accounting.)

A. I have.

Q. State whether or not any exact estimate has ever been made by you or by the Fenton Metallic Manufacturing Co. as to the cost of roller shelves such as made by said company and having the Hoffman improvement.

A. There has.

Q. What estimate has ever been so made, when was it made, and state the manner in which it was made?

384 A. The estimate is arrived at through regular course of business, as carried on for a number of years. All roller shelves of regular size are made on separate job numbers, and the various parts constituting a complete shelf are charged to that job separately. The cost of the various parts is arrived at by making a large number of the parts under a separate order number, which enables us to charge all labors and materials to that particular number. We make roller shelves of regular size in lots of 5 and 10 thousands, and when these roller shelves are used in a selling job number they are taken from stock and charged to the said job number. The roller shelves are divided into three parts—the frames, which consist of all the iron bars and labor of putting the same together, costs us 15 cents. There are eight iron rollers in each frame, which costs 16 cents, and two brass rollers, which costs 11 cents; the finishing of the frame costs 3 cents, and the general factory expense 25 per cent., making a total of 56 cents.

Q. When did you first make the estimate of the cost of the various parts—labor and incidental expenses which you have just given?

A. I should say five to seven years ago.

Q. Has that estimate ever been repeated since?

A. Yes.

Q. Am I to understand that you have had the knowledge of that

estimate since it was first made, so that at any time you could have stated the general cost of making shelves?

A. The estimate has always been made under my own direction and principally for my own information.

Q. Am I to understand that the various items of costs which you have specified were derived from actual investigation, or that they were estimated or guessed at?

385 A. They are taken from the actual labor and material that went into the construction and the work.

Q. Then, am I right in understanding that each of the items which you have specified was derived from actual investigation as to cost?

A. Yes.

Q. You have in your testimony heretofore referred to the cost and selling prices of roller shelves. In giving those prices did you refer to shelves alone or shelves in cases?

A. I should presume it referred to shelves in cases and shelves without cases.

Q. Am I right, therefore, in understanding that when you have given $2.25 as the cost of a shelf or the schedule price of a shelf that such price would include shelves in cases?

A. Yes.

Q. I have asked you to prepare me a statement showing the actual cost price of a number of shelves in cases in order that I might ascertain the relation which the cost of the case bears to the cost of the shelf. Have you done so?

A. I have, and produce the same.

(The statement produced by the witness is offered in evidence and is marked Complainant's Exhibit Hine Statement.)

(The statement objected to as not properly explained or proved to warrant its introduction at this time.)

Q. Referring to Exhibit Hine Statement, what do the nine items at the upper portion of the said exhibit refer to?

A. They refer to jobs that have been built in our factory which consisted of roller shelves only and which were shipped to customers.

386 Q. What is the meaning of the figures under the heading No. R. S.?

A. It means the number of roller shelves in each job.

Q. What is the meaning of the numbers to be found under the heading "cost"?

A. It means the cost of manufacturing each job as shown by our books.

Q. And what is the meaning of the numbers to be found under the heading "average"?

A. It is the price per shelf—I should have said cost instead of price—as obtained by dividing the cost of each job by the number of shelves in the job.

Q. Is there anything in this statement to show the number of shelves in each job?

A. Yes.

Q. Then, I understand that under the second part of this statement, as testified to by you, the average cost of roller shelves as made by the Fenton Metallic Manufacturing Co., including all expenses, is 56 cents. Does this or does this not agree with the average cost as given in the upper portion of the statement?

A. It does not agree with it.

Q. Please, then, explain why it is that the average cost per shelf, as indicated in the upper portion of the statement, is not the same as indicated in the lower portion of the statement.

A. The upper portion includes shelves in cases, while the lower portion is the cost of the shelves only.

Q. Then, were you correct where you stated that the nine items at the upper portion of the exhibit "refer to jobs that have been
387 built in our factory and which consisted of roller shelves only and which were shipped to customers"?

A. I was not correct in stating it just in that way. The nine items or jobs are for roller shelves in cases—no other devices, such as files, etc., forming any part of the order.

Q. Then, as I understand, the average price per roller shelf, as contained in the third column of the statement, is the average price in each instance per shelf of the specified number of shelves when combined with and arranged in the case, and this includes also the cost of the case. Am I right?

A. Yes.

Q. State whether or not you have found that in ascertaining the cost of making your cases you must add 25 per cent. to the cost of the case in order to include incidental expenses.

(Objected to as leading.)

A. Yes.

Q. State whether or not you have ever had occasion to make any accurate estimate as to the actual cost of the combined cases and shelves so as to know the actual cost per shelf of such combination.

A. I have frequently done so.

Q. And what have you found that to be?

A. They will average about $1.07 or $1.09 per pair.

Q. What do you find the average to be in the instance of the nine orders referred to in the Hine statement?

A. $1.09.

Q. If, then, I should deduct the cost per shelf, fifty-six cents, from the cost per shelf in case, $1.09, would or would not that give accurately the cost of the case per shelf?

A. It would.

388 Q. I believe you have stated that the average or standard length of shelf is 20 inches, and that the schedule price or a 20-inch shelf, including shelf, was $2.25. Am I right?

A. Yes.

Q. Then in regard to any order including a certain number of such shelves—say, for instance, there are 100 twenty-inch shelves in a case, where the price would be $225 and the cost $109, how would the profit be distributed as between the case and the shelf?

A. I should presume it would be about equally distributed.

Q. How have you considered it in carrying on your business?

A. I can't say that we have ever considered it in that way.

Q. State, as nearly as you can, if you ever have figured upon the matter at all, what proportion of the profit you have applied to the case and what proportion to the shelves.

A. I never have had occasion to divide the profit between the two.

Q. I assume that in the case of any material which you manufacture, taking the actual cost of manufacture and the actual receipts from your entire business, the amount of profit as to any specific material would be in proportion as to the cost of said material to the entire receipts. Am I right or wrong?

A. You are right.

(The statement prepared by witness is again offered in evidence, as previously marked, in view of the prior objection.)

(Former objection repeated, and the statement is further
389 objected to on the ground that it and the testimony in respect to it affords evidence of merely a speculative character and not direct and positive evidence that may be used as a guide in determining what the cost of production and of marketing the defendants' device may have been.)

Q. You have stated that you are familiar with the constructions of shelves and cases made and sold by the Office Specialty Manufacturing Co.; have you or have you not any reason for believing that the cost of making the roller shelf No. 4 and new No. 4 and the cases therefor by the said Co. materially differs from the cost of making the Hoffman shelf and cases therefor by your company?

A. In my opinion if manufactured under same conditions they would cost as much.

(Answer objected to as containing matter of opinion, not evidence.)

Q. State what is the percentage of cost of articles made — the Fenton Metallic Manufacturing Co. to be added to actual manufacturing expenses to include the cost of selling, agents' charges, advertising, etc.

A. We issue an accurate statement of our business each month, which includes every item of expense; all labor and material that was charged to jobs that were shipped during that month is taken as a basis and a per cent. added to it sufficient to cover the entire total of expenses of the company for that month, and the amount of work sold that month does not enter into the matter at all.

Cross-examination by Mr. CHURCH:

X Q. When do I understand this statement that you have put in evidence was prepared?

A. About three weeks ago.

390 X Q. Was it based upon the cost of materials and labor three weeks ago or at some other time?

A. It was based upon the cost of material and labor, as shown by our books, covering a period of two to four years—that is, from about the present time back to 1893 or perhaps 1892.

X Q. Did you used the estimated average cost of materials and labor during the period mentioned in the last answer as the basis for your said statement?

A. No, sir; I don't think I did. The statement is simply a memorandum as taken from the books of the company.

X Q. Can you state when the job of work indicated on the statement as No. 2126 was executed?

A. Not accurately.

X Q. Same question as to the job numbered 2714 on the statement.

A. That was executed in 1895.

X Q. From the difference in numbers which these jobs bear in the statement, about when do you think that job 2126 was executed?

A. It is my impression that it was executed in 1893.

X Q. This statement does not show the actual cost of materials or the actual cost of labor in connection with any one job, does it?

A. No.

X Q. So that the actual cost of labor or of materials at any period of time is not indicated by the statement; am I not right?

A. It is not indicated by the statement.

X Q. Under the heading "Roller shelves without cases" found in this statement you have given, as I understand you, the
391 cost of materials entering into the construction of one of the roller shelves made by the Fenton Metallic Manufacturing Co. under the Hoffman patent in suit, and also the cost of labor involved in the construction of such shelf; am I not right?

A. Yes.

X Q. At what period of time was this estimate of the cost of producing such a shelf made?

A. That system of manufacturing roller shelves was adopted by us some six or seven years ago, that system of manufacturing roller shelves under certain job numbers, and at least once, or perhaps twice or three times, a year we take pains in making a large number of shelves to verify the cost, and the amounts shown in memoranda are the amounts we are now charging each job for the regular roller shelves entering into its construction.

X Q. So that your statement indicates the cost of materials and of production of the Fenton shelf at this time only?

A. Yes; but these are the rates that have been running for the past two years.

X Q. When you say that these are the rates that have been running for the past two years you mean that that is your belief merely, and that it is not the result of a careful examination to ascertain the exact facts, do you not?

A. I mean that is the amount that we have charged each job for the roller shelf contained in it for the past two years.

X Q. Has there been no variation in the cost of materials or of labor during the last two years?

A. No material variation.

392 X Q. Does the Fenton Metallic Manufacturing Co. manufacture its own goods.

A. Yes.

X Q. Name the parts constituting what you refer to as "cases" in your statement.

A. It consists of the uprights, base plate, bottom shelf, top shelf, cornice, vertical rollers, and backs. Sometimes there are mouldings and sometimes there are not. Sometimes there are also doors.

X Q. You have followered the evidence that has been given from time to time by Mr. Carl F. Lomb, the general manager of the Office Specialty Manufacturing Co., during this accounting, have you not?

A. I may have read it, but I have not followed it.

X Q. Is it, in your judgment, possible for the defendants herein to give accurate and trustworthy evidence as to the cost of producing and marketing the roller shelves made by *it* alleged to be infringements of the Hoffman patent in suit, and also the same kind of evidence as to the price received from the sale of said shelves, considering the shelves as separate items of manufacture and sale apart from the cases and other accessories with which they were produced and sold?

A. I of course don't understand their system of book-keeping or of handling factory matters, but should presume that a very close estimate could be made from cost of jobs containing roller shelves only.

X Q. I am not speaking of estimates close or wide, and I ask you if you think it possible to ascertain accurately the cost of production and the selling price of the roller shelves that have been

393 made and sold by The Office Specialty Manufacturing Co., the defendant herein, in alleged infringement of the Hoffman patent in suit. I refer, of course, only to instances where the shelves were made for the defendants in connection with cases and other accessories and sold with the same.

A. I don't know whether it is possible or not.

X Q. Do you think you could ascertain the cost of production and the selling price—that is to say, the price received—of such roller shelves if opportunity were given you to make a thorough investigation of the matter?

A. I couldn't say.

X Q. What is your opinion?

A. I have no opinion, as I know nothing of their system of handling such matters.

X Q. Before your company, the complainant herein, adopted the system of making its roller shelves under a separate stock-job number would you not have had the same difficulty that the defendant now experiences of being unable to state just what the cost of any particular roller shelves produced in connection with cases and other accessories was, and would you not have been also embarrassed if you attempted to ascertain just what proportion of the selling price

of shelves, with cases and other accessories, was attributable to the shelves themselves?

A. In our factory we have always had a system of stock tickets and time-plates. Any roller shelves made for a particular job, all materials and labor would be charged to that job. The roller shelf has always been made in a department by itself, and we would have had no difficulty at any time in selecting from the material slips the material that went into the roller shelf or in arriving at the labor on the roller shelf by the number and name of the man
394 whose time was charged to that job in that department.

X Q. Now, as a matter of fact, did not the same men who worked upon the construction of the shelves proper also work upon the cases for the shelves and in the assembling of shelves in the casing, and was not their time taken when working upon shelves or cases indifferently?

A. So far as construction is concerned, I think I must say no; so far as assembling is concerned, yes.

X Q. By that you mean that the same persons did not make the shelves who made the cases, and that the assembling of shelves and cases was effected by those who neither made the shelves nor cases?

A. Yes.

X Q. You have not answered as to whether or not you would have been able to tell what proportion of the selling price was due to the shelves where shelves were sold with cases and other accessories. Will you please do so?

A. It can only be arrived at by establishing a proportionate rate I would say, further, that one salesman in estimating on a job might figure $2.00 each for the roller shelves and $.25 for the case; another might estimate the figures the reverse. The probabilty — they would not be estimated upon separately—that is, the roller shelf and cases for roller shelves—while other devices might be estimated separately.

X Q. In making an ordinary roller-shelf case provided with roller shelves I mean a case having uprights, vertical rollers, ends, top, bottom, back, panels, cornice, and base. What proportion of cost would be attributed by your company to the case and what proportion to the shelves, assuming that the case had, say, 14 roller shelves of ordinary dimensions?

A. Memoranda taken from our books, covering several jobs,
395 indicates that the proportion of costs of cases and shelves is about equal.

X Q. Your answer does not satisfy my specific question, and I therefore repeat it.

A. I have no means of knowing except from data taken from our books.

Recess until 2 o'clock p. m.

Met pursuant to adjournment.

Parties present as before.

X Q. Has your company any fixed and invariable — at which it sells roller shelves individually or roller shelves in cases?

A. No.

X Q. There are many considerations tending to fix the price of roller shelves in any given instance, are there not, such as the nature of the accessories sold with the shelves, the extent of the order, and the sharpness of competition; am I not right?

A. Competition has more to do with the fixing of price than all other considerations put together.

X Q. So that in this roller-shelf business, if it is attempted to ascertain the price at which any particular lot of goods, including roller shelves, was sold, it becomes necessary to determine the circumstances under which the sale was made, the nature and character of the competition, and like considerations, does it not?

A. At the present time; yes, sir.

X Q. Was this not always so where you had competition?

A. The time was when competition was substantially limited between the Office Specialty Company and the Fenton Metallic Manufacturing Co., which made it a very easy matter to determine the nature of the competition.

396 X Q. But so long as competition has existed, whether produced by the operations of the Office Specialty Manufacturing Co. or not, it has been necessary, has it not, in order to ascertain the figure at which any particular lot of goods, including roller shelves, was sold, to investigate the particular circumstances under which that sale was made?

A. I don't think so.

X Q. Please explain the reasons for your last answer.

A. I see no necessity for going inquirying into the circumstances under which an order was sold to ascertain what it was sold for.

X Q. But you cannot tell now, nor never could tell, in the absence of any fixed price for shelves, just what the profit to you was due to the sale of shelves, only in instances where shelves were sold with cases and other accessories for a lump sum; am I not right?

A. I never could tell without figuring the various items from the cost book.

X Q. If you figured the cost of producing the various items embodied in the combination of items sold and knew the selling price of the whole combination, how would you arrive at the profit that you had made on the shelves separately?

A. I would apportion the profit so the various devices forming the entire order on a percentage of cost. In other words, I would ascertain the actual profit by taking the cost from the selling price, and with that establish a per cent. of profit on the cost, which would give the profit on the various devices forming the order.

X Q. As a matter of fact, do you make the same profit on each item of goods manufactured by you that enters into combination orders?

397 A. No.

X Q. Then the plan of arbitrarily apportioning to each item a part of the profit, as in your second previous answer, is the only way you know of to ascertain the profit made upon any particular item. Do I understand you correctly?

A. You do, unless in selling the order the prices for the various devices are itemized.

By Mr. FOSTER:

Q. Am I to understand by the testimony which is given that your company has no schedule of prices for roller shelves and cases?

A. No; we have a schedule.

Q. Am I to understand that this schedule prevails unless for competition or other causes prices are modified?

A. Yes, sir.

Q. State whether or not any change in the cost of labor or material that would affect the cost of making the shelves would similarly affect the cost of making the cases.

A. I think it would.

Q. State whether your company has made like calculations as to cost of other articles than roller shelves in the same manner in which it has made such calculations as to roller shelves.

A. Yes, sir.

Q. I overlooked asking you what the No. 22 — which is added to 87½, which is added in Exhibit Hine Statement.

A. It represents the factory expense—the 25 per cent. added for that purpose.

Q. You were asked whether, under the heading "Roller shelves without cases," you had given the cost of materials, etc., entering into the construction "of one of the roller shelves." Am I
398 to understand that in the estimate in the Hine statement as to roller shelves without cases was figured upon a single shelf or upon the basis of a larger number of shelves?

A. It was figured on a basis of 5,000 or more shelves.

Q. And was or was not that the result of the careful examination and collection of the exact facts as to cost?

(Objected to as leading.)

A. It was.

JAMES W. HINE.

		No. R. S.	Cost.	Average.
2126	Vigo Co., Terre Haute, Ind.....	180	113 74	.63
2394	Comptroller's office, Austin, Tex..	540	395 58	.73
2386	Iona Co., Mich.....	266	177 60	.67
2270	Beaver, Pa.....	215	209 66	.97
2517	Dearborn Co., Ind.....	175	166 09	.95
2774	C. & C., Galveston, Tex.....	42	59 43	1.41
2781	Essex sav. b'k	42	36 99	.88
2754	Davis Co.....	36	24 64	.68½
2714	Jefferson Co., Ky.....	358	343 59	.96
		1,854	1,527 32	9,788
				87½
				22
				109

Roller Shelves Without Cases.

Frames	.15
8 iron rollers, .02	.16
2 brass " .05½	.11
Total	.42
Finish	.03
	.45
25 %	.11
	.56

399 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
OFFICE SPECIALTY MANUFACTURING CO.

It is stipulated and agreed that if C. F. Lomb were recalled he would testify as follows in answer to the following questions, and that the said questions and answers may be received and read as if duly given upon oral examination before the auditor after due notice:

Q. State whether the prices in the Yawman & Erbe bills except in instances where they specify no cases or but one or two shelves include also the cost of cases containing the shelves.

A. Yes.

Q. State the regular price at which you sell and have sold shelves of different sizes alone and apart from cases.

A. I submit herewith schedule of prices of shelves with and without cases which we adopted about a year ago for a guidance of our salesmen, but it is not always adhered to in actual practice:

Roller book shelves with cases:

20" wide x 14" deep or less	$2 25
20" " x 17" " " "	2 35
20" " x 20" " " "	2 50
20" " x 24" " " "	2 60
24" " x 17" " " "	2 50
24" " x 20" " " "	2 60
24" " x 24" " " "	2 75
24" " x 30" " " "	3 00
30" " x 17" " " "	3 00
30" " x 20" " " "	3 25
30" " x 24" " " "	3 50
30" " x 24" " " "	3 75
30" to 40" wide, without regard to depth	4 75
Over 40" wide	6 00

Roller book shelves without cases, deduct 40%.

400 Q. Are the prices given in memorandum No. 1 the prices of shelves alone or of shelves and cases?

A. Prices given in memorandum No. 1 are the estimated prices of shelves and cases.

Q. Are the prices given in memorandum No. 4 the selling prices of the shelves alone or of shelves and cases?

A. Prices given in memorandum No. 4 are the selling prices of shelves and cases.

Q. Please give the actual gross receipts from all departments of the defendant company's business during the period between Sept. 15, 1893, and December 31, 1895, also the actual gross expenses of said business during the same period.

A.—

Gross receipts between June 1, '93, and Dec. 31, '95..	$1,244,140 86
Gross expenses during same period, not including cost of goods	421,792 66

Q. Is or is not the above statement as to gross receipts and gross expenses prepared on the same basis as the gross receipts and gross expenses contained in the statement of Sept. 15, 1893, filed with the auditor?

A. Yes; it is.

Q. State whether or not the cases furnished by the Office Specialty Manufacturing Company with roller shelves are equally adapted to roller shelves having separated front rollers with a hand hole between them and roller shelves like No. 3 roller shelves having continuous front rollers.

A. Cases are adapted to either kind of roller shelves.

Q. As a matter of fact, are or are not the same cases used indifferently for roller shelves having divided front rollers and roller shelves having continuous front rollers?

A. Yes.

401 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
OFFICE SPECIALTY MANUFACTURING CO.

It is stipulated and agreed between the parties hereto, by their respective counsel, that if James W. Hine was recalled he would testify as follows, in answer to the following questions, and that the said questions and answers may be received and read as if duly given upon oral examination before the auditor after due notice:

Q. State whether or not you desire to make any corrections in the testimony which you last gave in this case.

A. Yes. I was in error in testifying in connection with Complainant's Exhibit Hine's Statement that twenty-five per cent. should be added to the cost of material and labor, and then adding this to the amounts set forth in said statement. I was correct in stating that it was our custom to add twenty-five per cent. to the

cost of material and labor to cover the incidents to cover the manufacture; but I found on my return to Jamestown that our superintendent was accustomed to adding this amount and that it had been included in the amount specified in the Exhibit Statement for cost of labor, material, and finish. The amount, twenty-five per cent. added in that statement should therefore be erased therefrom.

Q. You were asked during your last testimony what percentage of cost of manufacture by the Fenton Metallic Manufacturing Company should be added to include the cost of selling, agents' charges, and purchasing, etc., yet your answer failed to specify the exact percentage. State what that percentage is as found by actual investigation of your books.

402 A. Thirty-nine per cent. of the actual cost of the manufacture, including the twenty-five per cent. before named, will give the actual amount and proportion to be added to the cost of manufacture so as to include the cost of making and selling.

Q. I find at one point in your testimony the statement that your schedule selling rate of a twenty-inch shelf is $2.00, and that elsewhere it is specified as $2.25. What have you to say about this?

A. That must be a clerical error, as I never intended to make that statement, for the schedule price is well known to be $2.25.

JUNE 20, 1896—11 a. m.

Hearing by agreement.

Present: Mr. Foster, for the complainant, and Mr. Church, for the defendant-.

Counsel for complainant offers in evidence the testimony of J. W. Hine, taken by agreement on May 20, 1896, the stipulated testimony of C. F. Lomb, and also the stipulated questions and answers of J.W. Hine, dated June 19, 1896.

Counsel for complainant offers in evidence in rebuttal of the evidence as to the patent granted to Jewell & Yawman, No. 957,392, if the latter should be admitted in evidence, the duly certified copy of the file-wrapper and contents in the matter of the application for the said letters patent, and asks that the same be marked "Complainant's Exhibit Jewell & Yawman File-wrapper, Contents, and Drawing."

403 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO.
No. 13793. Equity. Docket 33.

Messrs. Church & Church.

SIRS: Please take notice that on Tuesday, October 13th, at 10 a. m., before the auditor in the above case, I shall move that the defendants herein be required to produce a book-keeper of defendant company, together with the books and memoranda of said company, showing the number of such roller shelves made for and furnished to the said company from April 7, 1891, to this date.

Respectfully, CHARLES E. FOSTER,
For Plaintiff.

Service acknowledged this 12 day of Oct., 1896.

CHURCH & CHURCH,
Sol'rs for Def'ts.

404 OCTOBER 13, 1896.

Hearing purcuant to notice.

Present: Mr. Foster, for the plaintiff, and Mr. Church, for the defendants.

Counsel for the plaintiff, in pursuance of notice served upon the defendants' counsel, presents a motion that the defendants be required to produce a book-keeper of the defendant company, together with the books and memoranda of said company, showing the number of such roller shelves made for and furnished to the said company from April 7, 1891, to this date.

After hearing counsel in support of the motion and adversely, the auditor directs that the defendants present and file on or before November 1, 1896, a statement showing the number, dimensions, and cost of all shelves, alone or in cases, containing the improvements described in claims 1 and 2 in the patent in suit made for or supplied to the defendants between April 1, 1891, and September 1, 1896.

The auditor on the same date prepared an order specifying its terms and requirements and transmitted the same to the counsel for the plaintiff to be copied and served upon the counsel for the defendant-.

The above order, by agreement between counsel, was subsequently modified to extend the time for the filing of the said statement to the 15th of November.

405 Patents, Oct. 4, 1896. 931 F street N. W., Washington, D. C.

In the Supreme Court of the District of Columbia.

THE FENTON METALLIC MANUFACTURING COMPANY
vs.
THE OFFICE SPECIALTY MANUFACTURING COMPANY and Others.

No. 13793.
Equity. Doc. 33.

This cause in reference coming on to be heard upon the motion of counsel for the complainant that the defendants be required to produce a book-keeper of the defendant company, together with the books and memoranda of said company showing the number of such roller shelves made for and furnished to the said company from April 7, 1891, to this date, and counsel being heard in support of and in objection to the said motion, it is by the auditor, this 13th day of October, 1896, ordered and directed that the said defendant company on or before the 1st of November, 1896, present and file herein a statement showing the number, dimensions, and cost of all shelves, alone or in cases, embodying the improvements described in claims 1 and 2 of the Hoffman patent in suit and referred to in the decision of the court in this case, and which shelves, alone or in cases, were made for or supplied to the said defendants between April 1, 1891, and September 1, 1896; and, further, that the said de-

fendant company produce competent and relevant evidence in their possession in support of the said statement or account.

406 It is further directed that in the making of such statement the account as to shelves described and styled as "new No. 4 shelf" be separately tabulated. JAS. G. PAYNE, *Auditor.*

In the Supreme Court of the District of Columbia.

THE FENTON METALLIC MANUFACTURING COMPANY
vs.
THE OFFICE SPECIALTY MANUFACTURING COMPANY and Others.
No. 13793. Equity. Doc. 33.

It is hereby stipulated and agreed between the counsel for the respective parties that the time set in the order of the auditor of October 13, 1896, in which the defendant was ordered and directed to make the showing therein set forth on or about the first day of November, 1896, be extended to and include November 16, 1896, and the auditor is requested to consent hereto.

CHARLES E. FOSTER, JR.,
Counsel for the Fenton Metallic Manufacturing Co.
CHURCH & CHURCH,
Counsel for the Office Specialty Manufacturing Company et al.

Washington, D. C., October 28, 1896.

407 Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
OFFICE SPECIALTY MANUFACTURING CO.
In Equity. No. 13793.

And now comes the defendant, The Office Specialty Manufacturing Company, by Church & Church, its solicitors, and in response to the order of the auditor dated the 13th day of October, 1896, submits the following annexed affidavit of Carl F. Lomb, general manager of the defendant company, and the schedules therein mentioned, as an additional statement in behalf of the said defendant.

OFFICE SPECIALTY MANUFACTURING CO.,
By CHURCH & CHURCH, *Their Solicitors.*

Nov. 20, 1896.

408 Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
OFFICE SPECIALTY MANUFACTURING COMPANY.

COUNTY OF MONROE, *State of New York,* } *ss:*

Carl F. Lomb, being duly sworn, deposes and says: I am of lawful age, the general manager of the Office Specialty Manufacturing Company, defendant in the above-entitled cause, and am the same person who has previously testified in the matter of the accounting in the above case before the auditor; that I have caused to be pre-

11350

O.S. Mfg Co

"Exhibit A" C.H.L. mk

Fig. 17. Roller Book-Shelf, Style No. 4. (Patented.)

Nos. 726 & 727
Boston Metallic Mfg. Co. et al
Office Specialty Mfg. Co. et al } P. 9411

"Exhibit B" C.H.L. mk O.S. Mfg Co

Fig. 16. ROLLER BOOK-SHELF, STYLE No. 4.

"Exhibit C" C.H.L. mk O.S. Mfg Co

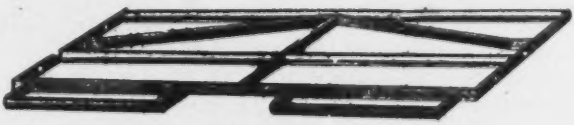


Fig. 16. ROLLER BOOK-SHELF, STYLE No. 4.

pared from the bills and documents in the possession of the company the accompanying schedules, one marked "Shelves without cases," and embodying three sheets, and the other marked "Shelves in cases," and embodying thirty-eight sheets; which schedules I believe to be correct, and which were prepared from the bills rendered to the company by the firm of Yawman & Erbe and show, as near as obtainable from these bills, the names of all persons or firms to whom the shelves or shelves in cases were furnished, the number and dimensions of said shelves alone or in cases, and the amount paid to Yawman & Erbe for said shelves alone and the shelves in cases. The roller book shelves with hand holes sold by our company from April 5th, 1891, to June 3rd, 1893, were of the style shown in the cuts hereto annexed and marked "Exhibit A" and "Exhibit B" and with my initials, and as appears from the schedule the number of such shelves of styles A and B sold in cases was twenty-seven thousand one hundred
409 and sixty-eight (27,168). The number of such shelves alone or without cases sold during the same period and of the same styles was one thousand and twenty-eight (1,028). From June 3rd, 1893, to September 1st, 1896, the only roller shelves with hand holes made and sold by the company were of the style shown in the cut hereto annexed and marked "Exhibit C" and with my initials, and of this style it appears from the schedule that during the period from June 3rd, 1893, to September 1st, 1896, there were sold in cases sixteen thousand two hundred and forty-nine (16,249) and alone or not in cases eleven hundred and seventy-eight (1,178). I have not separately tabulated the shelves described and styled in this action as "new No. 4 shelves," which, I understand, is the same as the one shown in the accompanying cut marked "Exhibit C," but, to the best of my knowledge and belief, all shelves with hand holes made and sold by the company since the 3rd day of June, 1893, are of this style. I submit herewith all bills rendered to the company by Yawman & Erbe for the items mentioned in the schedules, and which are made a part of this affidavit.

It will be noted that the aggregate number of No. 4 shelves made and sold between the date of the Hofmann patent in suit and June 3, 1893, as shown by the present statement, exceeds that shown by the statement of Feb. 15, 1893, and referred to in my testimony of Dec. 20, 1893. This discrepancy is due to the fact that my former statement was based upon reports furnished by the different offices of the defendant company, as shown by my said testimony, while the present statement is adduced from an examination of the Yawman & Erbe bills, which bills were before offered in evidence, but were not then used as the basis of computation. The present
410 statement I believe to be the correct one.

CARL F. LOMB.

Sworn to and subscribed before me this 18th day of Nov., 1896.

GEO. HERBERT SMITH,

[SEAL.] *Notary Public.*

(Here follow drawings marked page 411.)

412 NOVEMBER 24, 1896.

Hearing pursuant to notice.

Present: Mr. Foster, for the plaintiff, and Mr. Church, for the defendant-.

Mr. Foster offers in evidence copy of file-wrapper and contents in the matter of Jewell & Yawman's application, upon which letters patent No. 557,392 issued March 31, 1896, and the same is requested to be marked Complainant's Exhibit Jewell & Yawman File-wrapper, Contents, and Drawings.

Objected to by Mr. Church as incompetent, irrelevant, and immaterial and as an offer made too late, the proofs having been closed.

Counsel for plaintiff submits that he will show by the contents of the exhibit last offered matters material to the expert evidence in this case, but having no direct connection with the patent itself, and that the evidence is offered mainly for this purpose.

The said file-wrapper, contents, and drawings are filed and marked as requested.

The subject-matters of the reference were argued by the counsel for the plaintiff and the defendant- and briefs filed with the auditor.

413 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO.
No. 13793. Equity. Docket 33.

And now come the defendants, by Church & Church, their solicitors, and in response to the order of the auditor dated the 17th day of July, 1893, say as follows:

1. They are unable to file with the auditor or to present to complainant's counsel for inspection an accurate account of all profits, gains, and advantages which they, the said defendants, have respectively received or made or which have arisen or accrued to them respectively by reason of any infringement by them or either of them of the first and second claims of letters patent No. 450,124 since the date of said letters patent.

2. They report that the manufacture and sale of roller shelves of the particular patterns mentioned in the decree in this cause constituted but a small part of the defendant company's business; that before and ever since the date of the patent in suit said company has manufactured and sold in large numbers other and different patterns of roller shelves not containing the alleged invention of the patent in suit, besides document files and cabinets, index files, letter and bill filing cabinets, desks, and other office furnishings, and has kept no separate accounts relative to any special department of their said business; hence these defendants are unable to ascertain and state accurately the receipts and expenditures belonging
414 properly to the roller-shelf department of said company's business or any portion thereof, and the fullest compliance

they are able to make with the auditor's order herein is the following report or estimate based upon a careful examination of said company's books and other materials now accessible to them, which report they believe to embody as fair and just an account of the particular matters inquired of as can be ascertained.

3. (*a.*) They report that defendant company has made and sold since the date of the patent in suit twenty-five shelves of the pattern illustrated in figure 17 of Complainant's Exhibit Office Speciality Company Catalogue and 24,473 shelves of the pattern illustrated in Exhibit Hansmann's Sketch, making a total of 24,498 shelves. This enumeration includes all shelves made or sold by these defendants or either of them falling within the decree in this cause or containing the invention of claims 1 and 2 of the patent in suit.

(*b.*) They further report that the cost of production of the aforesaid shelves varied between 88c. per shelf and $1.67 per shelf, according to the size and finish of the article, and they estimate the average cost per shelf to have been $1.09, making the estimated total cost of said 24,498 shelves $26,702.82 *dollars.*

(*c.*) They further report that the selling price of said shelves varied from 95c. per shelf to $3.00 per shelf, according to the size and finish of the same and the circumstances attending their sale; that they are unable to ascertain the exact amount received for each shelf, but they estimate the average amount to have been $1.97 per shelf, making at this rate the total gross receipts from the sale of said shelves the sum of $48,261.06 *dollars.*

415 (*d.*) They further report that the estimated gross receipts from all departments of the defendant company's business during the period between the date of the patent in suit and the date of the decree awarding an accounting herein was $900,247.38 *dollars*, and the estimated gross expenses of said business during the same period was $345,474.87 *dollars;* that the proportion which the gross receipts from the sale of roller shelves of the particular patterns mentioned in the decree herein bears to the gross receipts of their whole business during the period mentioned is the proportion which $900,247.38 bears to $345,474.87, being 38.37 %, and that, estimated upon this basis, the expense chargeable to the manufacture and sale of the aforesaid 24,498 roller shelves is 38.37 % of the total gross receipts from the sale of said shelves, to wit, 38.37 % of 48,261.06 dollars, amounting to $18,517.94 *dollars.*

(*e.*) They further report that deducting from $48,261.06 *dollars*, being the estimated gross receipts from the roller shelves aforesaid, the cost of production, amounting to $26,702.82 *dollars*, and the percentage of expenses chargeable to the said shelves, amounting to $18,517.94 *dollars*, the estimated net profit received by defendant company from the sale of said roller shelves would amount to $3,040.20 *dollars.*

4. But defendants deny that the whole or any portion of the new profits that may have been received by them or either of them from the manufacture or sale of the aforesaid 24,498 roller shelves was or is attributable to any feature covered by claims 1 or 2 of the patent in suit, and that if any portion of said profits is due or attribu-

table to any feature covered by the said patent in suit they are unable to ascertain the amount.

416 Defendants say that the foregoing statement has been prepared under the direction of Mr. Carl F. Lomb, treasurer and general manager of the aforesaid company, and that they are ready and willing to submit Mr. Lomb for examination in respect of said statement and to produce before the auditor all accessible materials upon which said statement is predicated.

Defendants further say that the defendant Charles E. Birckhead never made or sold any roller shelves on his own account, but merely as the salaried agent of the defendant company, and that all sales made by said Birckhead were made for defendant company and are included in the above estimate and account.

CHARLES E. BIRCKHEAD.
THE OFFICE SPECIALTY MFG. CO.,
By CHURCH & CHURCH.

417 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO.
No. 13793.
Equity. Docket 33.

Before the auditor.

Messrs. Church & Church, solicitors for C. E. Birckhead and the Office Specialty Co.

SIRS: Please take notice that on Friday, November 17th, 1893, at 10 o'clock a. m., or such other time as we can be heard, we shall move the auditor for an order requiring an additional statement from the defendants in the above case, as set forth in our motion papers, a copy of which accompanies this.

Respectfully, FENTON METALLIC MANUFACTURING CO.,
By CHARLES E. FOSTER, *Solicitor.*

Service of notice and copy of papers acknowledged this 15 day of November, 1893.

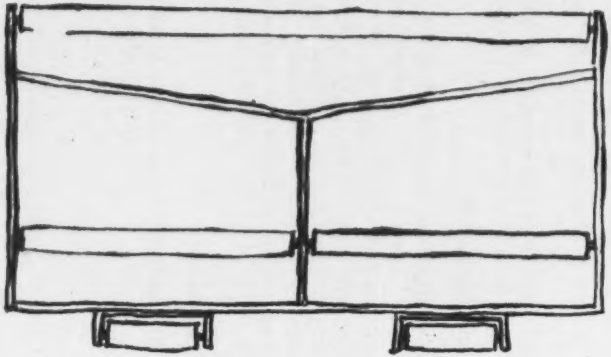
CHURCH & CHURCH,
Solicitors for Defendants.

418 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING CO.
vs.
CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING CO.
No. 13793.
Equity. Docket 33.

Before the auditor.

The plaintiffs, answering and excepting to the response of the defendants to the order of the auditor dated July 17, 1893, and without accepting the said response in any particular, hereby represent—



Nos 726 & 727

Fenton Metallic Mfg Co. et al
"
Office Specialty Mfg. Co. et al
} p. 2420

That the said response is a failure to comply with said order and in terms states that defendants are unable so to do, but presents no reasons for such alleged inability, and to the end that said order may be fully complied with the plaintiff asks for a further order upon the defendants that the defendants present a statement showing:

First. The names and residences of each of the parties to whom have been sold roller shelves and cases containing roller shelves embodying the improvements specified in the patent sued on, and claimed in claims one and two thereof.

Second. The number of shelves and shelves in cases, the sizes and character of finish of said shelves or shelves in cases so sold to each purchaser, and the places where the same were put in.

Third. The amounts received from each of said purchasers.

Fourth. That if any such shelves and cases and shelves have been manufactured and are on hand or manufactured, delivered, and not paid for that the statement shall so show,
419 and that the amount of any unpaid bills rendered for all sold and all delivered shelves or cases and shelves be set forth.

Fifth. The names of any party or parties, if any, by whom such roller shelves or parts thereof were manufactured for defendants, together with a statement of the number or amount and character of the things so made and the prices paid therefor.

Sixth. The elements that entered into the expense account of the manufacture of such shelves and cases.

Seventh. That in making such additional statement the defendants be required to include (in a special list if they so desire) all such roller shelves or casings containing roller shelves as they have manufactured or sold or caused to be manufactured or sold as differ in details of construction from that shown in Fig. 17, "Exhibit Office Specialty Manufacturing Co. Catalogue," or from "Exhibit Hansmann's Sketch," but embodying the invention of claims one and two of the patent sued upon, and particularly such shelves as are illustrated by the sketch hereto annexed and which upon information and belief are hereby alleged to have been made and sold by defendants since the date of the patent sued upon and which defendants are at this time manufacturing or having manufactured and selling and offering for sale.

FENTON METALLIC MANUFACTURING COMPANY,
By CHARLES E. FOSTER, *Solicitor.*

Washington, D. C., November 15th, 1893.

(Here follows drawing marked page 420.)

EXHIBIT "SHELVES IN CASES." W. B. H.

Order number ——.

From Office Specialty Mfg. Co., Rochester, N. Y., U. S. A., manufacturers of labor-saving office devices.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Apr. 9, 1891	Nat. Bldg., Loan & Protective Union..	Minneapolis, Minn.....	C. 2255	24	24⅝.....	1.35	1 B. C., 2 tier, B. & C., 2.40.....	34 80
13,	Equitable Life Assurance Society.....	Seattle, Wash.....	.....	8	21⅛, 4 R. Dp.....		Omnibus, 27 Shan, 1 check & 4 doc.	
13,	Pueblo Nat. bank.....	Pueblo, Colo.....	C. 2210	15	20⅝.....		Comb. case, 16 doc., 2" base.	
13,	" " "	" "	" "	5	20⅝, 4 R. Dp.....		" " "	
14,	Nat. Bank of Commerce.....	Tacoma, Wash.....	.....	20	20⅝ x 16.....	.90	Comb. case, 2 tier, B. & C., 2.00.....	20 00
14,	" " "	" "	.....	15	21"	.90	" 3 " " 3.00.....	16 50
17,	Pease Bros. & Co.....	Richland, Wisc.....	C. 2132	14	22"	1.03	" 1 " " 1.00; cornice, 4.30.	15 42
17,	Exchange Nat. bank.....	Little Rock, Ark.....	.....				Cornice, 2.83.	
17,	Exchange Nat. bank.....	Little Rock, Ark.....	C. 2313	15	27⅞, 4 R. Dp.....	1.47	Book-case.....	22 05
17,	" " "	" "	" "	15	20⅝, 3 R. Dp.....	.88	" "	13 20
17,	" " "	" "	" "	30	20" 3 R. Dp.....	.88	" " 3 tier, carpet, 3.00.....	29 40
21,	Am. Water Works Ass'n.....	Elmira, N. Y.....	H. O. 763	15	16¾.....		Comb. case.	
23,	" " "	" "	"	10	19¾.....		" " 5 tier, carpet.	
23,	Minneapolis Northern End Co.....	Minneapolis, Minn....	C. 2268	21	21 x 16½.....	.97	" "	20 37
23,	" " " "	" "	" "	3	21 x 10 x 16½.....	1.21	" "	3 63
27,	York Trust & Real Deposit Co.....	York, Pa.....	.....	16	21"		Comb. omnibus, 16 doc. files.	
28,	Queen City bank.....	Buffalo, N. Y.....	.....	24	21 x 4½, 4 R. Dp..	1.27	Comb. case, 4 tier, carpet, 21 x 20, 1.50.....	31 98
May 8,	Pillsbury-Washburn Fl. Mills Co.....	Minneapolis, Minn....	C. 2269	24	20⅝.....	.88	" " base & carpet (?).....	21 12
8,	Sonoma Co., Santa Rosa, Cali.....	Santa Rosa, Cali.....	C. 2403	5	21⅞".....		Cupboard, comb. case.....	23 97
8,	" " " "	" "	" " "	96	19¾ x 14.....	.88	Comb. case, 6 tier, B. & C., 6; cornice, 3.55...	90 48
8,	" " " "	" "	" "	96	19¾ x 14.....	.88	Do. do. cornice, 3.70...	90 48
8,	" " " "	" "	" "	96	19¾ x 14.....	.88	Do. do.	90 48
8,	" " " "	" "	" "	96	19¾ x 14.....	.88	Do. do.	90 48
8,	" " " "	" "	" "	80	19 13-16 x 14.....	.88	Do. 5 tier, B. & C., 5.00; cornice, 3.20.	75 40
8,	" " " "	" "	" "					
8,	" " " "	" "	" "	80	19 13-16 x 14.....	.88	Do. 5 tier, B. & C., 5.00; cornice, 3.20.	75 40
8,	" " " "	" "	" "					
8,	" " " "	" "	" "	64	25⅝ x 21.....	1.51	Do. 5 tier, B. & C., 8.75; cornice, 4.25.	105 39
8,	" " " "	" "	" "					
8,	" " " "	" "	" "	64	25⅝ x 21.....	1.51	Do. 5 tier, B. & C., 5.00.....	105 39
8,	" " " "	" "	" "				Do. cornice, 4.25.	
8,	" " " "	" "	C. 2283	2	20⅝.....		Do. 3 tier, carpet, 1.25.....	3 01
14,	Register of deeds.....	Plattsburg, N. Y.....	.....	20	19"		Comb. case.	
23,	Woodland Ad. Svgs. & Loan Co	Cleveland, O.....	.....	2	.....		" "	
25,	" " "	" "	.....	15	22¾"		" " 1 tier, B. & C.	
25,								

	25,	"	"	"		"	"					
	25,	"	"	"		"	"		*4	20¾ x 14¾	" "	
	29,	Municipal bldg				Buffalo, N. Y.			*6	20⅝	" "	
	29,	"	"			"	"		96	21⅝ x 15⅝	" "	86 40
	29,	"	"			"	"		54	21 x 15⅝	carpet, 2.25	50 85
	29,	"	"			"	"				cornice, 4.95.	
	29,	"	"			"	"		144	18½ x 19	" "	125 40
	29,	"	"			"	"		40	22¼ x 19	" "	44
	29,	"	"			"	"		3	18¾ x 19	" "	3 30
	29,	"	"			"	"		8	23⅛ x 19	" "	9 28
	29,	"	"			"	"		16	23⅝ x 19	" "	16 tier, carpet, 4.00; 4 tier, base, 4.00; cornice, 3.65	27 52
423									*1,361			
									*811			
									*1,361			
May	29, 1891	Municipal bldg				Buffalo, N. Y.			44	19⅜"	Comb. case, 2 tier, B. and C., 2.00	40 72
	29,	"	"			"	"		7	22½ x 24, 4 R.	" "	1 tier, B. & C., 1.00	9 61
	29,	"	"			"	"				" "	cornice, 5.45.	
	29,	"	"			"	"		132	19¼ x 15⅝	" "	7 tier, B. & C., 7.25	132 65
	29,	"	"			"	"				" "	cornice, 4.65.	
June	3,	Register of deeds				Fitchburg, Mass.			100	15½, 3 R. Dp	.88	Book-case, 5 tier, B. & C., 5.00; cornice, 2.55	127.40
	9,	James Ingliss, Jr.				Paterson, N. J.		N. Y. 955	110	20⅝ x 13⅝	.88	Comb. case, 5 tier, B. & C., 5.00	101 88
	9,	"	"			"	"	" "				" "	cornice, 4.15.
	9,	"	"			"	"	" "	154	20⅝ x 13⅝	.88	" "	7 tier, B. & C., 7.00	142 52
	9,	"	"			"	"	" "				" "	cornice, 4.35.
	9,	"	"			"	"	" "	66	20⅝ x 13⅝	.88	" "	3 tier, B. & C., 3.00	61 08
	9,	"	"			"	"	" "				" "	cornice, 2.27.
	9,	Tippecanoe county				Lafayette, Ind.		C. 2307	150	20⅝ x 13⅝	.88	Book-case, 10 tier, B. & C., 10.00	142 00
	9,	"	"			"	"	" "				" "	cornice, 6.60.
	9,	"	"			"	"	" "	150	20⅝ x 13⅝	.88	" "	10 tier, B. & C., 10.00	142 00
	9,	"	"			"	"	" "					cornice, 6.60.
	11,	Douglas county				Omaha, Neb.		C. 2359	200	20⅝	.88	Comb. case, 10 tier, B. & C., 10.00	186 00
	11,	"	"			"	"	" "	200	20⅝			cornice, 6.65.
	11,	"	"			"	"	" "	108	20⅝	.88	" "	6 tier, B. & C., 6.00	101 04
	11,	"	"			"	"	" "				" "	cornice, 6.48.
	12,	Commercial bank				Syracuse, N. Y.		H. O. 849	1			" "	doc. files, panelled sides.
	15,	Title, Loan & Trust Co.						C. 2239	19	23⅜", cl. 3 R. Dp		Omnibus.	
	16,	Probate office				Keene, N. H.		B. 756	96	19¼"		Comb. case.	
	16,	"	"			"	"	B. 756	16	15⅝"		" "	
	16,	"	"			"	"	B. 756	28	19½"		" "	
	16,	"	"			"	"	B. 756				" "	cornice.
	16,	"	"			"	"	B. 756	30	20⅝ x 13⅝		" "	
	16,	"	"			"	"	B. 756				" "	cornice.
	16,	County clerk				Snohomish, Wash.		C. 2355	46	21 x 13⅝	.92	" "	2 tier, B. & C., 2.00	44 32
	16,	"	"			"	"	" "	1			" "	cornice, 2.30.
	16,	"	"			"	"	" "	34	21 x 13⅝	.92	" "	2 tier, B. & C., 2.00	33 28
	16,	"	"			"	"	" "				" "	cornice, 1.75.
	16,	"	"			"	"	" "	17	21 x 13⅝	.92	" "	1 tier, B. & C., 1.00	16 64
	16,	"	"			"	"	" "				" "	cornice, 1.23.
	16,	"	"			"	"	" "	10	20⅝ x 13⅝	.92	" "	2 tier, B. & C., 2.50	11 70
	16,	"	"			"	"	" "				" "	cornice, 2.02.

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
June 16, 1891	County clerk	Snohomish, Wash	C. 2355	15	21 x 13⅝	.92	Comb. case, 3 tier, B. & C., 3.00	16 80
16,	" "	" "	" "				" " cornice, 2.30.	
16,	" "	" "	" "	36	20 x 18	1.23	" "	44 28
16,	" "	" "	" "	12	26 x 20	1.47	" " 3.3 tier, B. & C., 20", Dp., 4.95	22 59
16,	" "	" "	" "				" " cornice, $.70.	
16,	" "	" "	" "	96	20⅝ x 14⅝	.92	" " 8 tier, base & C., 8.00	96 32
16,	" "	" "	" "				" " cornice, 12.84.	
16,	" "	" "	" "	30	20⅝ x 13⅝		Omnibus, cornice	38 20
16,	" "	" "	" "	6	22⅝"		"	
17,	" Pittsburg	" "	" "	8	20"		"	
17,	" "							
				*3,582				
				*1,116				
				*3,082				
424								
June 18, 1891	McKean county	Sweetport, Pa		3	20"		Special case	3 50
18,	" "						Cornice, 3.25.	
19,	Carbon county	Rawlins, Wyom	C. 3314	80	20 x 13		Comb. case, 4 tier, carpet, 1.00	71 40
19,	" "	" "	" "				cornice, 2.63.	
19,	Minneapolis St. R'y Co	Minneapolis, Minn	C. 2428	12	25½ x 14		Comb. case.	
20,	City water works	Chattanooga, Tenn		6	23⅞ 4 R		Book-case	9 10
22,		Shreveport, Pa	W. 872	6			Comb. desk, cov. with green cloth	36 16
22,	Southold svgs. bank		N. Y. 976	8	15⅝		Comb. case.	
22,	" " "		" "	12	19⅝		" "	
22,		Scranton, Pa		15	21½ x 14		" "	14 40
26,	County commissioners						Special cornice, with nickel trim., 8.93.	
26,	" "			60	20⅝ x 13⅝	.88	Book-case, 4 tier, B. & C., 4.00	56 80
26,	Register of deeds	Madison, S. D		24	20"		Comb. case.	
27,	City clerk	Chicopee, Mass	B. 775	34			Special cornice, with nickel trim., 1.53.	
29,	Carson Nat'l bank	Auburn, Neb	C. 2353		20"	.88	Comb. case, 2 tier, B. & C., 2.00	31 92
29,		"	" "				Cornice, with nickel trim, 3.70.	
29,	" " "	" "	" "				Comb. omnibus.	
July 1,	Co. auditor & recorder	Sacramento, Cali	C. 2362	8	20⅝		Comb. case, 12 tier, B. & C., 9.00	148 44
17,	Prothonotary's office	Brookville, Pa		168	20 x 13⅝	.83	" " 4 tier, B. & C., 3.00	49 48
17,	" "	" "		56	20⅛ x 13⅝	.83	" " 6 tier, B. & C., 4.50	74 22
17,	" "	" "		84	20 x 13⅝	.83	" " panels, 28.53.	
17,	" "	" "					Book-case, B. & C., 2.00; carpet on top of case, .75	35 77
21,	August Russ	Boston, Mass	B. 570	26	23⅝ x 18	1.27	Comb. case, 7 tier, B. & C., 7.00	74 76
24,	Com's Montgomery county	Morristown, Pa		77	20¾"	.88	" " 6 tier, B. & C., 6.00	42 96
24,	" "	" "		42	19¾ x 13⅝	.88	" "	6 16
24,	" "	" "		7	18¾ x 13⅝	.88	" " 5 tier, base & carpet co., 5.00	29 64
24,				28	16¾ x 13⅝	.88		

	24,	" " "	" " "				" " cornice, 20.20.		
	24,	" " "	" " "		28	19⅝ x 13⅝ .88	" "		24 64
	24,	" " "	" " "		14	19⅝ x 13⅝ .88	" "		12 32
	24,	" " "	" " "		14	18⅞ x 13⅝ .88	" "		12 32
	24,	" " "	" " "		36	22¼ x 13⅝ .96	" "		34 56
	24,	" " "	" " "		48	20¾ x 13⅝ .88	" " 15 tier, base, 15.00		57 24
	24,	" " "	" " "		35	20¼	" "		
	24,	" " "	" " "		14	22¾	" "		
	24,	" " "	" " "		7	24¼	" "		
	24,	" " "	" " "		42	20¾	" "		
	25,	American B'k'g & Sav'gs Ass'n	Detroit, Mich		12	24⅝ x 19⅝, 4 R	Panels, 67.25. Comb. case, 1 tier, carpet, .25		17 41
	25,	" " "	" " "				" cornice & nickel trim., 6.96.		
	25,	" " "	" " "				" panel, 1.80.		
	28,	First National bank	Sedalia, Mo	C. 2449	40	20½ x 13⅝ .88	Comb. case		35 20
	28,	First National bank	Lima, Ohio		24	21 x 13⅝ .92	" " 2 tier, B. & C., 2.00		24 08
	28,	Com's of Washington Co	Washington, Pa		14	21⅝	" "		
	28,	" " "	" " "		14	22⅝	" " 2 tier, base.		
	28,	" " "	" " "		26	20⅝	Omnibus.		
	28,	County commissioners	Scranton, Pa		30	21½ x 16 .99	Book-case		29 70
					*4,236				
425					*816				
					*4,236				
July	31, 1891		Reading, Pa		120	19⅝ x 13⅝ .88	Comb. case, 12 tier, B. & C., 12.00		117 60
	31,	" " "	" " "				" " cornice, 13.40.		
	31,	" " "	" " "		70	19¾ x 13⅝ .88	" " 7 tier, B. & C., 7.00		68 60
	31,	" " "	" " "				" " cornice, 8.40.		
	31,	" " "	" " "		40	20 x 13⅝ .88	" " 4 tier, B. & C., 4.00		39 20
	31,	" " "	" " "				" " cornice, 5.45.		
	31,	" " "	" " "		120	19⅝ x 13⅝ .88	" " 12 tier, B. & C., 12.00		117 60
	31,	" " "	" " "				" " cornice, 13.40.		
	31,	" " "	" " "				" " panels, 39.99.		
	31,	" " "	" " "		35	20"	" " metal counter.		
	31,	" " "	" " "		7	20"	" "		
	31,	" " "	" " "		7	20"	" " panels.		
	31,	" " "	" " "		54	16½	" "		
Aug.	14,	Brule Co. auditor	Chamberlain, S. D		45	20⅝ x 14 .88	Book-case, 3 tier, B. & C., 3.00		42 60
	19,	City hall	Boston, Mass		10	24⅛ x 18	Omnibus		18 84
	19,	N. W. National bank	Minneapolis, Minn		16	19⅞	Comb. omnibus.		
	19,	" " "	" " "		8	14⅛	" "		
	19,	" " "	" " "		4	27"	" "		44 37
	19,	American Wheel Co	Chicago, Ills	C. 2431	15	20⅝ .99	Book-case		14 85
	19,	" " "	" " "	" "	15	20⅝ .94	" "		14 10
	19,	" " "	" " "	" "	5	22⅝ 1.11	" "		5 55
	19,	" " "	" " "	" "	5	22⅝ 1.06	" " 4 tier, B. & C., 4.00		9 30
	19,	Merchants' Nat. bank	Indianapolis, Ind		14	23⅛	Comb. case.		
	19,	" " "	" " "		14	20⅛	" "		
	20,	County commissioner	Lancaster, Pa		80	17⅝ x 16 .95	" " 4 tier, carpet, 4.00		80 00
							" " cornice, 1.35.		

[* In pencil in copy.]

Exhibit "Shelves in Cases." *W. B. H.*—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Aug. 20, 1891	County commissioner	Lancaster, Pa.		217	20 x 13 .88	Comb. case, 7 tier, B., 14c., 8.75	199 71
20,	" "	" "				" " cornice, 1.25.	
20,	" "	" "		205	20 x 13 .88	" " 5 tier, B., 10 C., 6.25 / " " 2 tier, B. & C., 50.	189 15
20,	" "	" "				" " cornice, 14.67.	
20,	" "	" "		155	19½ x 13 .88	" " 5 tier, B. & C., 10, 6.25	142 65
20,	" "	" "				" " cornice, 1.25.	
20,	Mercantile bank	Memphis, Tenn.		38	19⅝	Comb. case.	
20,	" "	" "		34	21⅝	" "	
20,	" "	" "		22	22⅝	" "	266 16
20,	University of Chicago	Chicago, Ills.	C. 2425	7	21"	" " cornice.	
24,	East End svgs bank	Cleveland, Ohio		7	21 x 15⅝ .99	" "	6 93
24,	" " " "	" "		14	22 x 15⅝ 1.03	" " 3 tier, B. & C., 3.00	17 42
24,	" " " "	" "		6	25" 4 R. Dp.	B. case	10 56
29,	Springfield 5c. svgs bank	Springfield, Mass.		4	19⅝ x 16, 3 R.	Comb. case.	
29,	" " " "	" "		16	17⅝ x 16, 3 R.	" "	
29,	" " " "	" "		20	12⅞ x 16, 4 R.	" "	
29,	" " " "	" "		4	12⅞ x 16, 3 R.	" "	
29,	" " " "	" "		2	12⅞ x 16, 3 R.	" "	
29,	" " " "	" "		28	21 5-16 x 16, 4 R.	" "	
29,	" " " "	" "		13	15⅞ x 16, 3 R.	" " carpet at bottom ea. tier, shelves, base, and cornice.	
				$5,712			
				$1,017			
426				$5,712			
Aug. 31, 1891		Omaha, Neb.		28	20⅝	Book-case, 2 tier, B. & C., cov. cornice.	
31,		" "				" " paneled sides	36 34
31,	Guaranty Loan & Trust Co.	Seattle, Wash.	C. 2490	26	20⅝ x 13⅜ .88	Comb. case, 2 tier, B. & C., 2.00	24 88
31,	" " " "	" "	" "			Cornice & trim., 4.50.	
Sept. 8, 1891		Dedham, Mass.	W. 1075	20	20⅝ x 13⅜	Book-case, 4 tier, base, 4.00	21 60
9,	Clerk of court	" "		6	27¾ x 25½, 5 A.	" "	11 00
9,	" "	" "		6	27¾ x 25½, 5 A.	" "	11 00
9,	" "	" "		7	34 x 21½, 5 R.	" "	14 86
11,	Citizens' Nat'l bank	Lyons, Iowa		18	21 x 13⅜	Comb. omnibus, 2 tier, carpet.	
11,	Board of survey	Boston, Mass.	B. 814	15	24⅝ x 17⅝	Book-case, base & carpet	30 40
12,			Pitts. 492	8	21⅛ x 13⅜	Comb. omnibus.	
14,	Mutual Fire Ins. Co.	Reading, Pa.	P. 973	21	18¼ x 13⅜	" " 3 tier, carpet.	
16,	Assumption parish	Napoleonville, La.		80	20⅝ x 13⅜ .88	Book-case, 5 tier, base, 5.00; cornice, 4.80	75 40
16,	Inspector of buildings	Boston, Mass.	B. 836	24	20¾ x 13½, 4 R.	Book-case, base	51 76
16,	" "						
17,	Adams & White	Black Rock, N. Y.		12	22¼ x 13⅝	Comb. case.	

17,	" "							" " 2 tier, carpet.	
17,	Civil district court				12	20¾ x 13⅝		Book-case, 3 tier, base, 3.75	47 43
17,	" "				39	25⅝ x 13⅝	1.12	" " cornice, 3.95.	
17,	" "							" " 3 tier, base, 3.75	47 43
17,	" "				39	25⅝ x 13⅝	1.12	" " cornice, 3.95.	
18,	City hall							Comb. case, 6 tier, B. & C., cornice	91 54
18,	" "				108	19¾ x 13½		" " base, carpet, & cornice	61 26
23,	Lorain St. savings bank				72	19⅝ x 13½		Book-case	16 94
23,	" " " "				14	25¾ x 16½	1.21	" " 2 tier, carpet, $50	29 90
24,	Cr. auditor Bon Homme Co.				28	21¾ x 16½	1.05	Comb. case, 5 tier, B. & C., 5.00	71
24,	" " " " "				75	19¾ x 13⅝	.88	" " cornice, 5.65.	
24,	" " " " "							Omnibus, panels, 8.50.	
26,	Albertson & Chamberlain				8			Comb. case, base.	
28,	County auditor				4	23¾ x 15⅝		" " 3 tier, B. & C., cornice, 4.50	49 74
28,	" "				48	20⅝ x 14	.88	" " 3 tier, B. & C., 3.00	36 12
28,	" "				36	21 x 13⅝	.88	" " cornice, 4.55.	
28,	" "							" "	
28,	" "				6	20 x 17½		" "	
28,	" "				6	22¼ x 17½		" " 4 tier, B. & C., 4.00; cornice, 5.55.	55 31
28,	" "				52	20⅝ x 13⅝	.88	" " 3 tier, B. & C., 3.00	22 32
28,	" "				21	21 x 13⅝	.92	" " cornice, 4.55.	
28,	" "							" " 5 tier, B. & C., 5.00; cornice, 6.40.	77 40
28,	" "				75	19⅞ x 13⅝		Omnibus	35 20
28,	" "				24	22⅛ x 16		Comb. case, 1 tier, B. & C., 1.09; cornice, 2.40.	13 96
29,	Auditors Deuel Co.				12	20⅝ x 13⅝		" " 4 tier, B. & C., 4.00	51 84
29,	" "				52	21 x 13⅝	.92	" " 4 tier, B. & C., 4.00	59 20
29,	" "				60	21 x 13⅝	.92	" " 1 tier, B. & C., 1.00	9 80
29,	" "				10	20⅝ x 13⅝	.88	" " 1 tier, B. & C., 1.00	9 80
29,	Adjutant General				10	20⅝ x 13⅝	.88	Comb. omnibus.	
					8	22⅝ x 17⅝			
427					*6,802				
					*4,012				
Sept. 30, 1891	Commonwealth T., Ins. & T. Co.	Philadelphia	1082		*6,802				
30,	" " "				10	20⅝ x 13⅝			
30,	Dooley county	Vienna, Ga.	H. O. 917		2	20⅝ x 13⅝		Comb. case.	
30,	" "				32	21 x 15½	.99	" " 2 tier, carpet.	
30,	" " "							" " 4 tier, B. & C., 4.00	35 68
30,	Rock. Germ. Ins. Co.	Rochester, N. Y.	H. O. 890		55	20⅝ x 15¼	.92	" " cornice, 5.00.	
30,	Minneapolis Street R'y Co.	Minneapolis, Minn.			10	21"		" " 9 tier, B. & C., 9.00	59 60
30,	" " "				6	21 15-16 x 14		" " 1 tier, B. & C., 1.00; cornice, 11.15.	
30,	State house	Augusta, Maine	B. 579		6	23⅝ x 14		" " panel.	
Oct. 14,	City hall	Camden, N. J.			20	17⅛	.88	B. C., 4 tier, C., 1.00; cornice, 4.50; ex., 7.72.	30 87
14,	" "				52	19 x 13⅝	.88	Comb. case, 7 tier, B. & C., 1.75	47 51
19,	County com'rs	Scranton, Pa.			40	18 x 13⅝	.88	" " 6 " 1.50	36 70
19,	" "				24	22 x 15	1.00	" "	24 00
19,	" "				27	22 x 15	1.00	" "	27 00
19,	" "				24	22 x 15	1.00	" " 9 tier, carpet, 2.25	26 25
19,	" "							" " cornice, 20.50.	
19,	" "				136	20 x 15	.92	" "	125 12
					9	21 x 15	.92	" " 15 tier, B. & C., 3.75	12 39

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. H. B.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Oct. 19, 1891	County com's	Scranton, Pa.		75	20 x 24	Comb. case, 14 tier, carpet, 3.50 cornice, 31.46.	102 50
19,	" "	" "				" "	
19,	" "	" "		81	21⅞ x 14⅝ 1.00	" " 9 tier, B. & C., 2.25	83 25
19,	" "	" "		45	21⅞ x 3 R.	" " 9 tier, B. & C., 2.25 cornice, 21.45.	74 25
19,	" "	" "				" "	
19,	" "	" "		36	21⅝ x 13 .96	" " 6 tier, B. & C., 6.00	40 56
19,	" "	" "		42	20¼ x 13 .92	" " 7 tier, B. & C., 7.00 panels, 104.36.	45 64
19,	" "	" "					
19,	County recorder	Santa Rosa, Cali.		48	20 x 13⅝ .88	B. C., 3 tier, B. & C., 3.00	45 24
19,	" "	" " "		16	20 x 13⅝ .88	" 1 tier, B. & C., 1.00.	
19,	" "	" " "				" cornice, 5.40	20 48
24,		Pittsburg		10	21⅝ 3 R.	" 2 tier, carpet, .50	11 20
31,	Chicago Herald	Chicago, Illi.	C. 2738	12	20⅝	Comb. case, 1 tier, carpet.	
31,	" "	" "	"	30	20⅝	" " 3 tier, carpet.	
31,	" "	" "	"	30	20⅝	" " 3 tier, carpet.	
31,	County com's.	Lancaster, Pa.		12	20 x 14½ .90	B. C., 1 tier, B. & C., 1.00; cornice, 2.06. panels, 10.00	23 86
31,	" "	" "					
31,	Etowah county	Gadsden, Ala.		72	20⅝ x 13⅝ .88	Comb. case, 6 tier, B. & C., 6.00; cor., 1.25	82 26
				48	20⅝	" "	42 24
				24	22⅝	" " B. & C., 8.00; cornice, 17.25	39 25
				36	20⅝ .88	" "	31 68
				12	22⅝	" " 4 B. & C., 4.00; cornice, 8.85	24 85
				40	21" .92	" " 4 tier, B. & C., 4.00	40 80
						" " cornice, 8.75.	
				24	21" .92	" " 3 tier, B. & C., 3.00 cornice, 6.66.	25 08
				10	31⅛ 1.39	" " 2 tier, B. & C., 3.00; cornice, 6.45; panels, 64.30.	16 90
				*7,982	* (455)		
428				*1,018			
				*7,982			
Nov. 6, 1891	Wahkiakum Co.	Cathlamet, Wash.		10	21 x 13⅝ .92	Comb. case, 1 tier, B. & C., 1.06 cornice, 2.45.	10 20
6,	" "	" "				" "	
6,	Middletown svgs. bank		N. Y. 1171	7	21⅜	Omnibus.	
6,	" "	" "	"	7	20⅞	" "	
7,	Compromise Mining Co.	Aspen, Colo.	C. 2719	18	20⅝ x 13⅝ .92	Comb. case, 2 tier, B. & C., 2.00 cornice, 4.00.	18 56
7,	" "	" "	"			" "	
7,	N. W. Consolidated Mlg. Co.	Minneapolis, Minn.	C. 2723	35	21⅜ x 15	" "	
7,	" "	" "	"	5	21⅜ x 15	" "	
11,	Bank of Montrose	Montrose, Colo.		18	21 x 13 .92	" " 2 tier, carpet, .50	17.06
11,	" "	" "		5	26½ 6 R.	" " base.	

11,	" " "		" "					" " cornice, 4.85.	
11,	Pope Mfg. Co.		Boston, Mass.		6	21⅝ x 18½	1.27	B. C., 2 tier, carpet	10 83
11,	Onerr & Rohn		Milwaukee, Wisc.		48	17⅝ x 14		Omnibus	57 20
12,	City clerk		Dover, N. H.	B. —	42	17⅝ x 13		Comb. case, 2 tier, B. & C., with cornice	35 56
12,			Pittsburg		10	20⅝		Omnibus.	
13,	Co. clerk Tuolumne Co		Sonora, Cali		56	20⅝	.92	Comb. case	51 52
13,	" " "		" "					Cornice, 4.85; panels.	
13,				N. Y. 1174	6	15⅝ x 19⅝		Comb. case.	
17,				" "	9	15⅝ x 19⅝		" "	
19,	Los Angeles County bank			Pitts. 633	18	22⅝		Omnibus.	
19,	City treasurer's office		Los Angeles, Cali.		12	20⅝ x 19⅝		" 1 tier, carpet.	
20,	County auditor		Pittsburg, Pa.	Pitts. 599	49	24⅞		Comb. case, carpet.	
21,	Auditor Renville Co.		Duluth, Minn		102	20⅝ x 13⅝	.92	B. C., 6 tier, B. & C., 6.00	99 84
23,	German Nat. bank		Beaver Falls, Minn.		11	20⅝ x 4" clear		Omnibus.	
23,	" " "		Pittsburg, Pa.		12	22 x 15⅝		Comb. case.	
23,	" " "		" "		24	22 x 15⅝		" "	
23,	" " "		" "		16	21⅝ x 15⅝		" "	
24,	People's G. L. & Coke Co.		" "		8	21⅛ x 15⅝		" "	
24,	" " "		Chicago	C. 2821	16	21⅝ x 20, 4 R.	1.33	" " 2 tier, base, 2.00	23 28
27,	" " "		" "	" "	8	20⅝ x 13⅝	.92	" "	7 36
27,	N. Y. B. Co		" "	" "	8	20⅝ x 13⅝	.92	" " 2 tier, base, 2.00	9 36
27,	" "		New York city	N. Y. 1223	72	21⅝ x 16½	1.00	" " 6 tier, B. & C, 6.00	78 00
27,	" "		" "	" "				" " cornice, 9.30.	
27,	" "		" "	" "				" " panels, 11.55.	
27,	" "		" "	" "	60	21⅝ x 16½	1.00	" " 5 tier, B. & C., 5.00	65 00
27,	" "		" "	" "				" " cornice, 6.75.	
30,	County commissioner		Clearfield, Pa.					" " panels, 11.55.	
30,	" " "		" "		96	19⅝ x 13⅝	.88	" " 12 tier, carpet, 3.00	87 48
30,	" " "		" "		88	20 x 30		" " 11 tier, B. & C., 16.50	164 34
30,	" " "		" "					" " cornice, 24.15.	
30,	" " "		" "		36	19½ x 13⅝	.88	" " 6 tier, carpet, 1.50	33 15
30,	" " "		" "		30	20½ x 30		" " 5 tier, base	94 70
30,	" " "		" "					" " cornice, 13.75.	
30,	" " "		" "		48	20½ x 13⅝	.92	" " 6 tier, B. & C., 1.50	45 66
30,	" " "		" "		48	19⅞ x 13⅝		" " 6 tier, B. & C., 9.00	89 64
								" " cornice, 13.75.	
429					*9,026				
					*1,011				
Nov. 30, 1891	County commissioners		Clearfield, Pa.		*9,026				
30,	" " "		" "		24	21 x 13⅝	.92	Comb. case, 3 tier, carpet, .75	22 83
30,	" " "		" "		24	21 x 13⅝		" " 3 tier, B. & C., 4.50	44 82
30,	" " "		" "					" " cornice, 6.55.	
30,	" " "		" "					" " panels, 27.70.	
30,	" " "		" "		72	20 x 13⅝	.92	" "	66 24
30,	" " "		" "		16	20⅝ x 13⅝	.96	" " 11 tier, B. & C., 11.00	26 36
30,	" " "		" "					" " cornice, 23.13.	
30,	" " "		" "		60	20 x 13⅝	.88	" "	52 80
30,	" " "		" "		12	21 x 13⅝	.92	" " 6 tier, B. & C., 6.00	17 04
								" " cornice, 12.60.	

[*In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Nov. 30, 1891	County commissioners	Clearfield, Pa		21	21 x 13⅝	.92	Comb. case, 3 tier, B. & C., .75	20 07
30,	" "	"					" " cornice, 6.55.	
30,	" "	"		70	20 x 13⅝		B. & C., panels & base	205 35
30,	" "	"					Panels on case, 20.80.	
Dec. 5,	County clerk	Henderson, Ky	986	24	20 x 14½	.90	B. & C.—B. & C., 3.00; cornice, 6.25	30 85
5,	" "	"	"	6	21¾ x 16	1.03	" 1 tier, carpet, .25	6 43
9,	" "	" Tenn		36	20⅝		Omnibus	45 84
11,	Centre county	Bellefonte, Pa		28	20	.88	Comb. case	24 64
11,	" "	"		7	24 x 13⅝		" " 5 tier, carpet, 1.25	8 53
11,	" "	"					" " cornice, 23.12.	
11,	" "	"		27	13 x 18, 4 R	1.15	" " 9 tier, carpet, 2.25	33 30
11,	" "	"		6	14¾ x 18, 4 R	1.15	" " 1 tier, carpet, .25	7 15
11,	" "	"					" " cornice, 13.75.	
11,	County commissioners	Reading, Pa		35	20 x 13⅝	.88	" " 5 tier, B. & C., 5.00	35 80
19,	" "	"					" " cornice, 14.05.	
19,	" "	"		28	21 x 20, 4 R		" "	58 11
19,	" "	"					" " panels.	
19,	Com's Potter county	Coudersport, Pa		86	19⅝ x 13⅝	.88	" " 7 tier, carpet, 1.75	77 43
19,	" "	"					" " cornice, 14.25.	
19,	" "	"		70	19⅝ x 13⅝	.88	" " 7 tier, carpet, 1.75	63 35
19,	" "	"					" " cornice, 14.25.	
19,	" "	"		80	19 x 13⅝	.88	" " 8 tier, carpet, 2.00	72 40
19,	" "	"					" " cornice, 15.90.	
19,	" "	"		30	23½ x 13⅝	1.04	" " 3 tier, carpet, .75	31 95
19,	" "	"					" " cornice, 7.05.	
19,	" "	"		2	22 x 13⅝	.96	" " 2 tier, carpet, .50	2 42
19,	" "	"					" " cornice, 2.25.	
19,	" "	"					" " panels, 48.75.	
30,	Com's Centre county	Bellefonte, Pa		60	19 x 13	.88	" " 4 tier, carpet, 1.00	53 80
30,	" "	"		27	19 x 13⅝	1.68	" " 4 tier, B. & C., 6.00; cornice, 7.90	59 26
30,	" "	"		16	19 x 13⅝	.88	" "	14 08
30,	" "	"		54	19 x 13⅝	.88	" " 4 tier, B. & C., 4.00	51 52
30,	" "	"					cornice, 9.35.	
30,	" "	"		56	21 x 13⅝	.92	" " 4 tier, B. & C., 4.00	55 52
30,	" "	"					" " cornice, 8.75.	
30,	" "	"		40	22 x 13⅝		B. C., counter panels—panels, 75.00	61 32
				10,043*				

						811*				
						10,040*				
Dec.	28, 1891	Susquehanna county	Montrose, Pa.			80	19⅝ x 13⅝ ..... .88	Comb. case, 10 tier, carpet, 2.50		72 90
							False to 30″.			
	28,	" "	"			60	19⅝ x 13⅝ 1.68	" " 10 tier, B. & C., 15.00		115 80
	28,	" "	"					" " cornice, 20-31.		
	28,	" "	"			50	19⅝ x 13⅝ ..... .88	" " 3 tier, B. & C., 3.00; 1 tier, base, .25.		47 25
	28,	" "	"				(False back to 30″	" " cornice, 7.50.		
	28,	" "	"			18	20 x 13⅝ 1.68	" " 3 tier, B. & C., 4.50		34 74
	28,	" "	"			33	20 x 13 ..... .88	" " 3 tier, base, carpet, .75		29 79
	28,	" "	"					" " cornice, 6.25.		
	28,	" "	"			8	22¾ x 13⅝ 1.00	" "		8
	28,	" "	"			28	20 x 13⅝ ..... .88	" " 9 tier, carpet, 2.25		26 89
	28,	" "	"					" " cornice, 20-31.		
	28,	" "	"					" " cornice, 9.85.		
	28,	" "	"					" " cornice, 8.20.		
	28,	" "	"			28	20⅛ x 13¼ ..... .88	" " 4 tier, carpet, 1.00		25 64
	28,	" "	"					cornice, 13.05.		
	28,	" "	"			77	17¾ x 13⅝ ..... .88	" " 11 tier, carpet, 2.75		70 51
							False back to 30″.			
	28,	" "	"			66	17¾ x 13⅝ 1.68	" " 11 tier, B. & C., 16.50		127 38
	28,	" "	"					" " cornice, 20.31.		
	28,	" "	"			40	17⅜ x 13¼ ..... .88	" " 4 tier, B. & C., 4.00		39 20
	28,	" "	"					" " cornice, 9.85.		
	28,	" "	"			24	19⅝ x 13⅝ ..... .88	" " 4 tier, base, carpet, 1.00		22 12
							False back to 30″.			
	28,	" "	"			24	19⅝ x 13⅝ 1.68	" " 4 tier, B. & C., 6.00		46 32
	28,	" "	"					" " cornice, 16.40.		
	28,	" "	"					" " panels, 81.45.		
Jan.	7, '92		Pittsburg	Pitts. 663		6	18 x 13⅝	" "		
	7,		"	"		3	20 x 13⅝	" "		
	7,		"	"		2	22¾ x 16¼	" "		
	7,		"	"		2	22¾ x 16¼	" "		
	7,		"	"		2	21 x 13¼	" "		
	7,		"	"		4	21 x 13¼	" "		
	15,		"	P. 682		10	20⅝ x 13⅝	" "		
	18,	Redwood Co. Svgs. bank	Redwood Falls, Minn.	C. 2830		8	21 x 13⅝ ..... .92	" " 2 tier, base, 2.00		9 36
	18,	" "	"	"				" " cornice, 4.37.		
	18,	" "	"	"				" " panels, 11.45.		
	21,	" "	Pittsburg, Pa.	Pitts. 683		48	21 x 13⅝	" " 12 tier, carpet.		
	26,	Washington county	Hillsborough, Ore.	C. 2889		72	20½ x 14	Omnibus		102 66
	26,	Douglas county	Rosebury, Ore.	C. 2992		64	20¼ x 13⅝ ..... .92	Comb. case, 8 tier, base, carpet, 2.00		60 98
							False back to 20″.			
	26,	" "	"	"		10	20¼ x 13⅝ 1.23	" " 2 tier, B. & C., 2.50		14 80
	26,	" "	"	"				Cornice, 9.94.		
	26,	" "	"	"		24	21 x 13⅝ ..... .92	Comb. case, 2 tier, base, carpet, .75		22 83
							False back to 20″.			
	26,	" "	"	"		10	24⅝ x 13⅝	" " 2 tier, B. & C., 1 P. H.		33 00
	26,	" "	"	"				" " cornice, 4.00.		
	26,	" "	"	"				" " panel, 11.25.		

[* In pencil in copy.]

THE O. S. MFG. CO. VS. F. M. MFG. CO. 11,000

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Jan. 26, '92	Island county	Coupeville, Wash.	C. 2880	36	21 x 13⅝ ..... .92	Comb. case, 6 tier, carpet, 1.50	34 62
						" " cornice, 7.15.	
				12	21½ x 13⅝ 1.00	" " 2 tier, base, carpet. .50; cornice, 2.40.	12 50
				10,892*			
431				711*			
				10,892*			
Jan. 27, 1892	Auditor Mason county	Shelton, Wash.	C. 2894	52	21 x 13⅝ ..... .92	Comb. case, 4 tier, B. & C., 4.00	61 84
27,	" " " "	" "				" " cornice, 5.40.	
27,	R. S. Quarles	Bedford City, Va.	H. O. 990	54	21 x 13⅝ ..... .88	" " 3 tier, B. & C., 3.00	50 52
27,	" "	" "				" " cornice, 4.55.	
29,	County Com's Montgomery Co.	Norristown, Pa.		35	20 x 13⅝	" " }	
29,	" " "	" "		7	18 x 13⅝	" " }13 tier, B. & C., 13.00	98 36
29,	" " "	" "		55	17 x 13⅝	" " }	
29,	" " "	" "				" " panel, 8.95.	
29,	" " "	" "				" " cornice, 12.25.	
29,		" "		30	20 x 13⅝	Counter panels.	
30,	Elk county	Ridgeway, Pa.		128	18⅞ x 13⅝ ..... .88	Comb. case, 7 tier, B. & C.	119 64
30,	" "	" "				" " cornice, 13.75.	
30,	" "	" "				" " panels, 12.18.	
30,	" "	"		59	22 x 13⅝ ..... .96	" " 3 tier, B. & C., 3; 1 tier, carpet, .25	59 89
30,	" "	"				" " cornice, 8.75.	
30,	" "	"		33	20⅛ x 13⅝ ..... .92	" "	30 36
30,	" "	"		33	20¼ x 13⅝ ..... .92	" " 1 tier, carpet, 1.50	31 86
30,	" "	"				" " cornice, 26.25.	
30,	" "	"				" " panels, 10.51.	
30,	" "	"		110	16⅝ x 13⅝ ..... .88	" "	96 80
30,	" "	"		18	20⅝ x 13⅝ ..... .88	" " 12 tier, carpet, 3.00	18 84
30,	" "	"				" " cornice, 45.30.	
30,	" "	"				" " panels, 10.82.	
30,	Flour City Nat. bank	Minneapolis, Minn.		4	18⅝ x 13⅝	" " 1 tier, carpet, .25	3 87
27,	German savings bank	Omaha, Neb.	C. 2895	22	21 x 13⅝ ..... .92	" " 2 tier, carpet, .50	20 74
27,	" " " "	"	"			" " cornice, 11.80.	
27,	" " " "	"	"			" " panels, 16.68.	
28,	Com's Berks county	Reading, Pa.		54	20 x 13⅝ ..... .88	" " 6 tier, B. & C., 6.00	53 52
28,	" " " "	"		54	20 x 13⅝ ..... .88	" " 6 tier, B. & C., 6.00	53 52
28,	" " " "	"		6	20⅝ x 13⅝, false back.	Counter.	
28,	" " " "	"		6	20⅝ x 13⅝ " "	"	
28,	" " " "	"		21	20 x 13⅝	"	
28,	" " " "	"		21	20 x 13⅝	Comb. case, cornice, 33.65.	

28,	" " "	"					" "	panels, 90.75.		
11,		Pittsburg	Pitts. 732	5	20⅝ x 13⅝		" "	base.		
15,	H. Rasmussen	Rawlins, Wyom		7	19⅝ x 13⅝	.88	" "	1 tier, carpet, .25	6	41
20,	Surrogate's office	Utica, N. Y		4	20⅝		" "	panels & cornice.		
20,	Nashua saving bank	Nashua, N. H	P. 987	24	20¼ x 13⅝		" "		3	00
23,	Mechanics' svgs. bank	Worcester Mass		1	2" x 7, rollers	3.00	" "	1 tier, carpet, .25	2	09
24,	Cottrell & Sons	Westerly, R. I		2	20⅝		" "	cornice, 7.10	25	28
24,	Surrogate's office	Batavia, N. Y	1003	16	19⅝ x 13⅝		" "	4 tier, B. & C., 6.00	28	68
24,	" " "	" "	"	14	20⅝ x 13⅝		" "	panels, 17.26.		
				11,767*						
432				1,014*						
				11,767*						
Feb 25, 1892	Steele county	Owatonna, Minn	C. 2865	32	20⅝ x 13⅝	.92	Comb. case, 2 tier, B. & C., 2.00		31	44
25,	" " "	"	"	64	20⅝ x 13⅝	.92	" "	4 tier, B. & C., 4.00	62	88
25,	" " "	"	"	80	20⅝ x 13⅝	.92	" "	5 tier, B. & C., 5.00	78	60
25,	" " "	"	"	48	20⅝ x 13⅝	.92	" "	3 tier, B. & C., 3.00	47	16
25,	" " "	"	"	13	20⅝ x 13⅝		" "	1 tier, B. & C., 1.00	12	96
25,	" " "	"	"	48	20⅝ x 13⅝		" "	3 tier, base, 3.60	45	16
25,	Surrogate's office	Lyons, N. Y		2	20⅝		" "	cornice, 56.30.		
25,	Probate judge Clinton Co	Wilmington, Ohio					B. C.		2	09
25,	" " "	"					Cornice, 5.60.			
25,	" " "	"					Panels, 49.00.			
25,	" " "	"		16	21 x 13⅝	.92	Com. case, 1 tier, B. & C., 1.00		15	72
25,	" " "	"		96	20⅝ x 13⅝	.92	" "	6 tier, B. & C., 6.00	94	32
25,	" " "	"		42	18¼ x 13⅝	.88	" "	2 tier, B. & C., 2.00	38	96
25,	" " "	"		80	21⅝ x 13⅝	.96	" "	5 tier, B. & C.	81	80
25,	" " "	"		16	21 x 13⅝	.92	" "	1 tier, B. & C., 1.00	15	72
25,	" " "	"					" "	cornice, 15.45.		
25,	Kenosha county	Kenosha, Wisc	C. 2923	60	20⅝ x 13⅝	.92	" "	panels, 68.65.		
25,	" " "	"	"	19	20⅝ x 13⅝	.92	" "	3 tier, B. & C., 3.00	58	20
25,	" " "	"	"	28	20⅝ x 13⅝	.92	" "	1 tier, B. & C., 1.00	18	48
25,	" " "	"	"	38	20¾ x 13⅝	.92	" "		25	76
25,	" " "	"					" "	2 tier, C., .50; 2 tier, B. & C., 2.00	37	46
29,	Mesa Co. State bank	Grand Junction, Colo	C. 2886	33	20¼ x 13⅝		" "	cornice, 15.40.		
29,	Minneapolis Trust Co	Minneapolis, Minn	C. 2896	6	24¼ x 18		" "	3 tier, carpet, .75	31	11
29,							" "	cornice, 3.10.		
29,	Central bank	Rochester, N. Y		10	21 x 13⅝		Omnibus.			
29,	" " "	"		18	23 x 21⅝		Comb. case.			
M'ch 9,	Boisé City N. bank	Boisé City, Idaho	C. 2930	10	20⅝ x 13⅝	.92	" "	cornice & panels.		
9,	" " "	"	"	14	20⅝ x 20, 4 R		" "	1 tier, B. & C., 1.00	10	20
9,	" " "	"	"	14	23⅝ x 20, 4 R		" "		18	06
9,	" " "	"	"				" "	2 tier, B. & C., 20", Dp., 3.00	22	74
9,	" " "	"	"				" "	cornice, 32.50.		
10,	Thomas Lowry	Minneapolis, Minn	C. 2898	3	23⅝ x 15⅝		" "	panels, 8.60.		
10,	Com's Dauphin county	Harrisburg, Pa	Phila. 1250	24	21 x 13⅝	.92	" "	cornice & panels.		
10,	" " "	"	"	11	20⅝ x 13⅝	.92	" "		22	08
10,	" " "	"	"	44	20 x 13⅝	.88	" "		10	12
							" "	7 tier, carpet, 1.75	40	47

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
M'ch 10, 1892	Com's Dauphin county	Harrisburg, Pa.	Phila. 1250	16	21 x 3, R. F. B., 29"	Comb. case	27 52
10,	" " "	"	"	14	20 x 3, R. F. B., to 29"	" "	23 52
10,	" " "	"	"	14	18 x 3, R. F. B., 29"	" " 6 tier, B. & C., 9.00	32 52
10,	" " "	"	"			" " cornice, 12.05.	
10,	" " "	"	"			" " panels, 18.22.	
10,			W. 1156	12	26⅞ x 13⅝ .92	B. C., 2 tier, carpet, .50	11 54
14,		New York city		2	20⅞ x 14¾	B. C.	5 37
15,	Chief Insp. Thos. Byrnes	Pittsburg	P. 723	10	21⅝ x 13⅝	Comb. case.	
16,		Dakotah city, Ia		54	26⅝ x 14 .92	B. C., 3 tier, C., 3.00; cornice, 3.10	55 78
16,	Humboldt county	Duluth, Minn.	C. 2995	102	26⅝ x 17 1.19	" 6 tier, C., 1.50	122 88
18,	County auditor			12,860*			
				915*			
				12,860*			
433							
		Pittsburg, Pa.	P. 778	4	21 x 13⅝	Comb. case.	
M'ch 18, 1892		"		4	22⅝ x 13⅝	" " 7 tier, B. & C., 7.00	50 12
18,				49	17⅝ x 13⅝ .88	" " 6 tier, B. & C., 6.00	42 96
22,				42	18 x 13⅝ .88	Counter.	
22,				6	20 x 13⅝	7 tier, B. & C., 7.00	49 24
22,				42	18⅞ x 13⅝	cornice, 37.32.	
22,						panels, 35.52.	
22,				40	19¾ x 13⅝ .92	Comb. case	36 80
22,		Honesdale, Pa.		20	15¾ x 30, F. B. 1.88	" " 4 tier, B. & C., 6.00	43 60
24,	Wayne county	"		25	15⅞ x 30, " 1.88	" " 5 tier, B. & C., 1.25	48 25
24,	" "	"		56	20 x 13⅝, " .88	" " 8 tier, B., carpet, 2.00	51 28
24,	" "	"		49	20⅝ x F. B. to 30, 1.72	" " 7 tier, B. & C., 10.50	94 78
24,	" "	"		2	24½ x 15	" "	2 30
24,	" "	"		4	18½ x 15 .95	" " 3 tier, B., carpet, .75	4 55
24,	" "	"		57	18¾ x 13⅝	" " 3 tier, B. & C., 3.00	33 16
24,	" "	"				cornice, 29.40.	
24,	" "	"				panels, 39.75.	
24,	" "	"		54	19⅝ x 13⅝	Comb. case, 9 tier, base, carpet, 2.25	49 77
24,		Greenville, Ohio		54	19⅝ F. B., 30"	" " 9 tier, B. & C., 13.50	104 22
25,	Darke county	"		42	20⅝ F. B., 30"	" " 7 tier, B. & C., 10.50	81 06
25,	" "	"		12	18¾ x 13⅝	" " 2 tier, carpet, .50	11 06
25,	" "	"		12	19¾ x 13⅝	" " 2 tier, carpet, .50	11 06
25,	" "	"		48	16¾ x 13½	" " 4 tier, carpet, 1.00	43 24
25,	" "	"				cornice, $21.70.	
25,	" "	"				panels, 62.05.	
25,	" "	"				Comb. case.	
25,	" "	Pittsburg, Pa.	P. 784	3	21 x 13⅝		

	28,	Auditor Fall River Co.	Hot Springs, S. D.	C. 3006	65	20¾ x 13⅝	.92	" " 5 tier, carpet, 1.25	61	05
	28,	" " "	" " "		21	20⅝ x 13⅝	.92	" " 3 tier, carpet, .75	20	07
	28,	" " "	" " "		54	19⅝ x 13⅝	.88	" " 3 tier, B. & C., 3.00	50	52
	28,	" " "	" " "		20	20⅝ x 13⅝	.92	" " 2 tier, carpet, .50	18	90
	28,	" " "	" " "		5	21 x 13½	.92	" " 1 tier, carpet, .25	4	85
	28,	" " "	" " "					cornice, 15.85.		
				806						
				826						
	30,	" " "	Pittsburg, Pa.	Pitts. 830	5	21 x 13⅝		3 cases.		
	30,	" " "	" "	" 758	7	22⅝ x 13⅝		Comb. case.		
	31,	Gardiner svgs. bank	Gardiner, Me.	B. 978	8	20 x 15		" "		
Apr.	6, 1892		Pittsburg	P. 828	5	21¼ x 13⅝		" "		
	6,		"	793	5	21⅝ x 13⅝		" "		
	6,		"	798	5	21 x 13⅝		" "		
	6,	N. H. Banking Co.	Nashua, N. H.	B. 991	5	22⅝ x 15⅝		" "		
	6,	" " "	"	"	2	22⅝ x 15⅝		" "		
	6,	" " "	"	"	5	20⅝ x 15⅝		" "		
	6,	" " "	"	"	2	20 x 15⅝		" "		
	9,	Citizens' bank	Ogden, Utah	C. 3060	14	21 x 16½		" " 2 tier, B. & C., 2.00	15	86
	11,		Pittsburg	P. 808	4	21 x 13⅝		" " cornice.		
	11,		"	" 797	11	21 x 13⅝		" "		
					13,728*					
					917*					
434					13,728*					
Apr.	14, 1892	Com's Elk county,	Ridgeway, Pa		8	20", 4 R. Dp.	.87	Cupboards.		
	14,	People's Svg. Loan Ass'n	Cleveland, Ohio	1049	4	20⅛, " "	.87	" metal sides, 6.80	17	24
	14,	" " "	"	"	16	23⅝ x 16½		Comb. case, carpet.		
	14,	" " "	"	"	14	22⅝ x 13⅝		Omnibus.		
	15,	Stiffel & Freeman	Washington		16	22⅝ x 16		Comb. case, 2 tier, base, carpet	17	62
				831						
	16,		Pittsburg	855	52	21 x 13⅝		13 comb. cases alike.		
	16,		"	799	8	21 x 13⅝		Comb. case.		
	16,	Pillsbury & Washburn F. Mills Co.	Minneapolis, Minn.	C. 3105	12	21 x 15⅝, 3 10½ clear.		" " 3 tier, carpet.		
	16,		Pittsburgh	P. 823	4	21 x 13⅝		" "		
	25,			N. Y. 435	14	20⅝ x 13⅝		Omnibus	22	20
	28,	Peninsular svgs. bank	Detroit, Mich.	H. O. 1046	14	18⅞ x 13⅝		Comb. case.		
	28,	" " "	"	"	14	19⅝ x 13⅝		" "		
	28,	" " "	"	"	14	20⅝ x 13⅝		" "		
	28,	" " "	"	"	9	22⅝ x 20, 3 R.		" "		
	28,	" " "	"	"	7	27⅛ x 20, 4 R.		" "		
	28,	" " "	"	"				panels & cornice.		
	30,	First Nat. bank	Trinidad, Colo.	C. 3109	14	21 x 15⅝	.92	Comb. case	12	88
	30,	" " "	"	"	14	22 x 15⅝	.96	" "	13	44
	30,	" " "	"	"	14	23 x 15⅝	1.00	" " 3 tier, carpet, .75	14	75
	30,	" " "	"	"				" " cornice, 8.70.		
	30,	" " "	"	"				" " panel, 2.93.		
	30,	Com's Greene Co.	Waynesburg, Pa.	1055	35	21 x 13⅝	.92	" "	32	20
	30,	" " "	"	"	7	21 x 13⅝	.92	" " 6 tier, carpet, 1.50	7	94
	30,	" " "	"	"	36	21x13⅝, F. B.,30"	1.72	" " 6 tier, B. & C., 9.00	70	92

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Apr. 30, 1892	Com's Greene Co	Waynesburg, Pa.	1055	30	20⅝x13⅝ F.B.30"	1.72	Comb. case	51 60
30,	" " "	"	"	30	20x13⅝ F.B., 30"	1.68	" " 10 tier, B. & C., 15.00	65 40
30,	" " "	"	"	24	20⅝ x 13⅝	.92	" "	22 08
30,	" " "	"	"	12	23⅛ x 13⅝	1.04	" " 6 tier, carpet, 1.50	13 98
30,	" " "	"	"	55	19⅞ x 13⅝	.88	" " 11 tier, carpet, 2.75	51 15
30,	" " "	"	"	60	20¼x13⅝ F.B.30"	1.72	" " 10 tier, B. & C., 15.00	108 20
30,	" " "	"	"	25	21⅛ x 13⅝	.96	" " 5 tier, carpet, 1.25	25 25
30,	" " "	"	"	25	20⅝ x 15	.96	" " 5 tier, carpet, 1.25	25 25
30,	" " "	"	"	35	20⅝ x 13⅝ F. B., 35"		" " 5 tier, B. & C., 10.00	78 95
30,	" " "	"	"	77	20⅝ x 13⅝		" " 11 tier, carpet, 2.75	73 59
30,	" " "	"	"	28	21 x 13⅝ F. B., 30"		" "	48 16
30,	" " "	"	"	12	21⅝ x 13⅝ "		" "	21 12
30,	" " "	"	"	21	19⅞ x 13⅝		" " 3 tier, carpet, .75	19 23
30,	" " "	"	"	12	20 x 13⅝		" " 1 tier, B. & C.	
30,	" " "	"	"				" " cornice, 187.82.	
30,	" " "	"	"				" " panels, 51.47.	
			857					
			602					
May 5,		Pittsburg	889	20	21"		4 comb. cases.	
			910					
5,	Clerk of court	Bedford City, Va.	1075	45	21 x 13⅝	.92	B. C., 3 tier, base, 3.00	44 40
10,	Conveyance Title Ins. Co.	Boston, Mass.	B. 1036	25	25⅝ x 19, 4 R		Omnibus.	
11,	Daviess county	Washington, Ind.	1038	20	20⅝ x 16½		Comb. case, 2 tier, base, 2.00	21 80
11,	" "	"	"				cornice, 23.37.	
11,	" "	"	"				panels, 21.83.	
			14,610*					
			1,113*					
435			14,610*					
May 12, 1892	County commissioners	Lock Haven, Pa.	1019	32	19 x 13⅝	.88	Comb. case	28 16
12,	" "	" "	"	32	20 x 13⅝	.88	" " 8 tier, B. & C., 8.00	36 16
12,	" "	" "	"	40	19⅜ x 13⅝	.88	" " 4 tier, base, 4.00	39 20
12,	" "	" "	"	32	19 x 13⅝	.88	" " } 8 tier, base, 8.00	64 32
12,	" "	" "	"	32	19⅝ x 13⅝	.88	" " }	
12,	" "	" "	"	32	19⅝ x 13⅝	.88	" "	28 16
12,	" "	" "	"	24	21 x 13⅝	.92	" " 7 tier, base, 7.00	20 08
12,	" "	" "	"	40	19⅜ x 13⅝	.88	" " 4 tier, base, 4.00	39 20
12,	" "	" "	"	24	18¾ x 13⅝	.88	" "	21 12
12,	" "	" "	"	40	15¾ x 13⅝	.88	" "	35 20
12,	" "	" "	"	24	20¾ x 13⅝	.92	" " 11 tier, base, 11.00	33 08
12,	" "	" "	"				" " cornice, 48.75.	

12,	" " "	" " "	"				" " panels, 59.25.		
17,	City clerk	Fitchburg, Mass.	B. 1036	11	18⅝ x 11¼ F. B.		Comb. case.		
17,	" "	" "		11	19⅝ x 12 F. B.		" "		
17,	" "	" "		11	21⅝ x 14½ F. B.		" "		
17,	Ashtabula county	Jefferson, Ohio		24	18¼ x 15	.92	" "		
17,	" " "	" "		24	19⅜ x 15	.92	" "	4 tier, B. & C., 4.00	48 16
17,	" " "	" "		72	19¼ x 15	.92	" "		
17,	" " "	" "		72	18¼ x 15	.92	" "	6 tier, B. & C., 6.00	66 24
17,	" " "	" "		30	20⅝ x 15		B. C. omnibus		72 24
17,	" " "	" "		252	21⅛ x 16	.95			40 45
17,	" " "	" "		18	21⅛ x 16	1.03	Comb. case, 14 tier, B. & C., 14.00		253 40
17,	" " "	" "		90	21 x 16	.99	" " 1 tier, base, 1.00		19 54
17,	" " "	" "		184	17⅝ x 15	.92	" " 5 tier, base, 5.00		94 10
17,							" " 8 tier, base, 8.00		177 28
17,							cornice, 52.75.		
17,							panels, 20.99.		
18,	Wadeville county	Newport News, Va.	C. 3167	10	26⅝ x 22, 4 R.		Comb. case, 1 tier, base, 1.25		17 55
18,	" " "	" "	1066	18	21½ x 13⅜	.96	" "		17 28
18,	" " "	" "	"	24	21 x 13⅜	.92	" "		22 08
18,	" " "	" "	"	36	21¼ x 13⅜	.96	" " 8 tier, base, 8.50		42 56
18,	" " "	" "	"	8	20⅜ x 28, 5 R.	1.65	" " 1 tier, base, 1.50		14 70
18,	" " "	" "	"				cornice, 11.60.		
19,	County commissioners	Montrose, Pa.	1059	19	22½ x 16½	1.27	panels, 33.15.		
19,	" " "	" "	"	6	18¼ x 13⅜	.88	Comb. case, 1 tier, B. & C., 1.00		25 13
19,	" " "	" "	"				" " 1 tier, carpet, .25		5 53
19,	" " "	" "	"				cornice, 8.45.		
			930				panels, 17.83.		
			940						
19,		Pittsburg	P. 924	20	21 x 13⅝				
20,	First Nat. bank	New Castle, Pa.	Pitts. 874	3	24⅝ x 20		5 cases alike.		
20,	" " "	" "		10	21 x 13⅝		Comb. cases.		
25,	Carbon county	Rawlins, Wyom.		16	21 x 13⅝	.92	" "		
				48	21 x 13⅝	.92	" " 1 tier, base, 1.00		15 72
				48	20¾ x 13⅝	.92	" " 3 tier, base, 3.00		47 16
				48	21 x 13⅝	.92	" " 3 tier, base, 3.00		47 16
				16	21 x 13⅝	.92	" " 3 tier, base, 3.00		47 16
							" " 1 tier, base, 1.00		15 72
				16,091*			Panels, 14.62; cornice, 7.95.		
436				1,114*					
May 26, 1892	Germania F. Ins. Co.	New York city	N. Y. 1847	16,091*					
26,	" " " "	" " "	"	10	25⅝ x 25¼, 5 R. Dp.		R. S. case, no base or cornice		221 10
28,	Monongalia county	Morgantown, W. Va.	Pitts. 757	14	28⅝ x 25⅞, 5 R. Dp.		2 R. S. cases		249 48
28,	" " "	" "	"	45	23¾ x 13⅝		Comb. case.		
28,	" " "	" "	"	30	23⅝ x 13⅝		" "		
28,	" " "	" "	763	75	20⅝ x 13⅝		" " cornice & base.		
28,	" " "	" "	"	195	20⅝ x 13⅝	.92	" "		179 40
28,	Lycoming county	Williamsport, Pa.	1078	30	23⅝ x 13⅝	1.00	" " 15 tier, B. & C., 15.00		45 00
28,	" " "	" "	"	18	20 x 15	.92	" "		16 56
28,	" " "	" "	"	18	22⅞ x 15	1.04	" " 4 tier, carpet, 1.00		34 12
							cornice, 19.60.		

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
June 1, 1892		Pittsburg, Pa.	Pitts. 877	4	20¼ x 13⅝	Comb. case, with base.	
3,		" "	" 994	12	21 x 13⅝	" " " "	
4,	Register of deeds	Boston, Mass.	1066	20	24⅝ x 18½	Omnibus, cornice, 1.25	33 89
			875				
			878				
4,		Pittsburg	P. 886	28	21 x 13⅝	7 comb. cases, with base.	
			888				
4,	Northampton Nat. Bank	Northampton, Mass.	B. 1051	8	19⅝"	Comb. case, with case.	
4,	" " " "	" " " "		2	27⅝	" " " "	
4,	Edison Elec. Ill. Co.	Boston	1071	10	24⅛ x 18	Omnibus	22 14
6,	Montgomery county	Norristown, Pa.		12	See other page.		
8,	Marion county	Columbia, Miss.		171	20⅝ .96	R. S. case, 9 tier, B. & C., 9.00	173 16
8,	" "	" "		76	20⅝	" " 4 tier, B. & C., 4.00	76 96
8,	" "	" "		57	20⅝ .96	" " 3 tier, B. & C., 3.00	57 72
8,	" "	" "				Cornice, 17.95.	
8,	" "	" "				Panels, 18.86.	
8,	Exchange Banking Co.	Macon, Ga.		26	24⅝, 5 R. Dp. 1.77	R. S. case	56 12
10,		Pittsburg, Pa.	Pitts. 963	5	21 x 13⅝	Comb. case, 1 tier, C. base.	
10,	Montgomery county	Winona, Miss.	H. D. 1080	64	21 x 14 .92	" " 4 tier, B. & C., 6.00	64 88
10,	" "	" "				Cornice, 4.25.	
10,	" "	" "				Panels, 19.72.	
10,		Pittsburg	Pitts. 962	4	21 x 13⅝	Comb. case.	
13,	Albertson Trust & Dep. Co.	Norristown, Pa.	P. 1435	2	21 x 15⅝ 1.15	" " 1 tier, carpet, .25	2 55
16,		Pittsburg	Pitts. 982	10		2 comb. cases, alike.	
16,	U. S. Credit System Co.	Newark, N. J.	N. Y. 1512	8	22½ x 17⅝ 1.27	Comb. case	10 16
16,	" " " "	" "	"	32	18½ x 17⅝ 1.15	" "	36 80
16,	" " " "	" "	"	8	16¼ x 15⅝ 1.15	" " 6 tier, B. & C., 6.00	15 20
25,		Baltimore	W. 1211	160	18⅝ x 13⅝ .88	4 B. C., double-faced	140 80
25,		"		80	19⅛ x 13⅝ .88	"	70 40
25,		"		240	18⅝ x 13⅝ .88	" 24 tier, B. & C., 24.00; cornice, 28.40; panels, 51.85.	315 45
28,		San Francisco, Cali.	C. 3251	4	20⅝ x 13⅝	Comb. case, 1 tier, carpet.	
28,		" "				Panels, 13.30; cornice, 2.95.	
28,	Exchange Nat. Bank	Little Rock, Ark.	C. 3251	5	26⅝ x 30½, 6 R. Dp.	B. C., 1 tier, carpet	13 78
28,	City clerk	Dover, N. H.		21	20½ x 13	B. C.	19 32
28,	" "	" "		21	20½ x 13	2 tier, B. & C., 2.00; cornice, 2.05	23 37
28,		Pittsburg	P. 985	4	21 x 13⅝	Comb. case, 1 tier, carpet.	
30,	Florence county	Florence, S. C.	1210	39	20⅝ x 15½	1 case, 3 doors, 3 tier, B. & C., & cornice	87 20
				17,695*			

				915*			
				17,695*			
June 30, 1892	Worcester Co. Inst. for Svgs.	Worcester, Mass.	1111	36	20¼ x 14⅝	Comb. case, 3 tier, carpet.	
30,	" " " "	" "	"	9	19⅞ x 14⅝	" " 1 tier, carpet.	
30,	" " " "	" "	"	2	20¾ x 14	" "	
30,	" " " "	" "	"	4	20¾ x 14	" " 1 tier, carpet.	
30,	Nat. Bank of Cumberland	Cumberland, Md.		8	21⅝ x 14	" " 1 tier, carpet.	
30,	Chicago News Co.	Chicago	C. 3267	21	14⅝ x 13⅝	Comb. case with base.	
July 8,	County clerk	Charleston, W. Va.		38	22 x 16	2 desks, panels & cornice.	
12,	Springfield svgs. bank	Springfield, Mass.	B. 1081	18	18¼ x 13⅝		
12,	" " "	" "		9	16⅝ x 13⅝	Comb. case with base.	
12,	" " " "	" "		22	18¾ x 15½	" "	
14,	Warren Svgs. Bank. Co.	Warren, Ohio	1218	54	19 x 15½	" " cornice & carpet.	
14,	" " " "	" "		21	22⅝ x 13⅝	" " with base.	
14,	" " " "	" "		2	23⅝ x 13⅝	" "	
14,	" " " "	" "		1	20⅝ x 13⅝	" "	
14,		Washington, D. C.	1209	24	20⅝ x 13⅝	B. C., 2 tier, carpet	24 08
14,	Northumberland county	Sunbury, Pa.		42	21⅛ x 13⅝	Comb. case, 14 tier, carpet, 3.50	43 82
14,	" " "	"		64	21⅛ x 13⅝, F. B., 18"	" " 8 tier, B. & C., 10.00	84 24
14,	" " "	"		48	21⅛ x 13⅝, F. B., 30"	" " 6 tier, B. & C., 9.00	93 48
14,	" " "	"		2	22½ x 17½ 1.27	" " 1 tier, carpet	2 79
14,	" " "	"				cornice, 22.55.	
14,	" " "	"				panels, 53.21.	
14,	Mifflin county	Lewistown, Pa.	1204	42	20⅝ x 13⅝, F. B., 30"	Comb. case, 7 tier, B. & C., 10.50	84 42
14,	" "	"		30	19 x 13⅝, F. B., 30"	" " lap ledge, R. H. & L. H. side	86 85
14,	" "	"		12	21 x 13⅝, F. B., 30"	" " 2 tier, base, 3.00	24 12
14,	" "	"		18	22¾ x 13⅝, F. B., 30"	" " 3 tier, base, 4.50	39 06
14,	" "	"		50	20⅝ x 30"	B. C., counter, double-faced, 30"	96 30
14,	" "	"		40	20⅝ x 30"	" " "	
14,	" "	"				panels, 49.11.	
14,	" "	"				cornice, 26.70.	
15,	Greene county	Waynesburg, Pa.		8	21⅞ .96	B. C., 1 tier, carpet, .25	7 93
18,	" "	"	N. Y. 1570	24	21⅝ x 14⅝	Comb. case, 2 tier, carpet, .50	25 70
18,		"				cornice, 5.05.	
18,	Cheshire Provident Inst.	Keene, N. H.	1003	28	19⅝ x 13⅝	Comb. case, 2 tier, base.	
18,	" " "	"		11	20"	" "	
18,	" " " "	"		6	20⅝	" " 4 " base & cornice	16 05
18,	" " " "	"				panels, 4.76.	
21,	Chatham county	Savannah, Ga.	H. O. 1226	34	24⅝ 1.72	B. C	58 48
21,	" "	"		17	28⅝ x 22½, 5 R.	3 tier, base, 3.75	36 39
21,	" "	"				cornice, 3.95; panel, 9.84.	
25,	Wicomico county	Salisbury, Md.	1228	100	19 x 13⅝, F. B., 28	Set on 6" base	189 70
27,	Buncombe county	Asheville, N. C.	1227	54	18⅝ x 14 .88	Comb. case, 3 tier, B. & C., 3.00	50 52
27,	" "			54	18½ x 13⅝	" " 3 " B. & C., 3.00	25 08
27,	" "					cornice, 14.25.	
27,	" "					panels, 6.72.	
27,	" "						
				18,672*			

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

438

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
				919*			
				18,672*			
July 29, 1892	Montgomery county	Norristown, Pa.	Phil. 1461	136	19⅞ x 15	.92	142 12
29,	" "	"	"	44	15⅞ x 15	.92	
29,	" "	"	"	40	17⅞ x 15	.92	
29,	" "	"	"	48	19⅞ x 15	.92	
29,	" "	"	"	16	15⅞ x 15=148 @	.92	
29,	" "	"	"	18	20"		220 42
29,	" "	"	"				
29,	" "	"	"	12	22"		210 44
29,	" "	"	"	18	17"		
29,	" "	"	"	6	22"		
Aug. 11,	First National bank	Dawson, Pa.		7	22½ x 13⅝		Comb. case with base.
11,	People's National bank	Norristown, Pa.		7	20⅝ x 13⅝		" "
11,			Phil. 1481	6	20 x 16⅞		Comb. case, 3 tier, carpet.
11,	" " "			18	20 x 16⅞		" " 3 tier, carpet.
15,	Caroline county	Denton, Md.	1236	18	22¼ x 13⅝	1.00	18 00
15,	" "	"	"	36	21 x 13⅝		39 12
15,	" "	"	"	18	21⅝ x 13⅝		" " 6 tier, B. & C., 6.00 17 28
15,	" "	"	"	36	20⅝ x 13⅝		" " 6 tier, B. & C., 6.00 39 12
15,	" "	"	"	16	21⅝ x 16¼		B. C., 2 tier, base, 2.00; cornice, 2.20. 19 36
15,	" "	"	"				cornice, 15.65.
15,	" "	"	"				panels, 7.48.
17,	W. Wythe	Toronto, Ont.			21"		Case still shelving.
17,	" "	"		15	26⅝		"
17,	" "	"		45	21"		
17,	County clerk	Somerville, N. J.	N. Y. 1653	72	20⅝ x 13⅝	.92	Comb. case. 66 24
17,	" "	"	"	14	24 x 13⅝	1.04	" " 14 56
17,	" "	"	"	204	21¼ x 13⅝	.96	" " 195 84
17,	" "	"	"	14	23¾ x 13⅝	1.04	" " 14 56
17,	" "	"	"	72	21 x 13⅝	.92	" " 20 tier, B. & C., 20.00 86 24
17,	" "	"	"				cornice, 19.70.
17,	" "	"	"				panels, 51.00.
17,	Yuma county	Yuma, Cali.	C. 3366	36	19¾ x 13⅝	.88	R. S. case, 3 tier, carpet. 75 32 43
22,	" "	"	"	10	29¾ x 24, 5 R	2.02	" " 2 tier, base, 3.00; cornice, 3.00 26 30
23,	W. Wythe	Toronto, Ont.			26⅝		Comb. case, panels & cornice.
25,	Globe Nat. bank	Boston	1150	30	20⅝ x 17⅞, 4 R		" " base & cornice.
25,	" " "	"	"	6	26⅛ x — 5 R. Dp		" " with base.
27,	Rutland svgs. bank	Rutland, Vt.	1140	32	18⅞ x 15½		" "
27,	" " "	"	"	5	26⅛ x 15½		
27,	" " "	"	"	27	15⅞ x 13⅝		

27,	Portland saving bank	Portland, Maine	1126	8	21⅝ x 14½	" "		
27,	" " "	"	"	16	20 x 14½	" "		
27,	" " "	"	"	10	20 x 14½	" "		
27,	" " "	"	"	20	20 x 14½	" "		
27,	" " "	"	"	16	20 x 13⅞	" "		
31,	" " "	Pittsburg	1036	6	20¾ x 13⅝	" " panel, 6.80.		
						" " with base.		
				19,830*	(8 and 9.)			
				1,015*				
				19,830*				
Aug. 31, 1892	Nat. Bank of Lawrence Co.	New Castle, Pa.		8	20 x 13⅝	Comb. case with base.		
31,	" " " " "	" "		8	18 x 13⅝	" "		
31,	" " " " "	" "		1	28¼ x 19⅝	" "		
31,	" " " " "			3	28¼ x 19⅝, 4 R.	" "		
Sept. 7,	D. W. Casseday	Minneapolis, Minn.	C. 3419	33	20 x 14½	" " 3 tier, base, 3.00	33	36
12,		Pittsburg	1019	15	20⅝ x 13⅝	" "		
12,				15	22⅝ x 13⅜	" " base, carpet, & cornice.		
12,	County clerk	New Brunswick, N. J.	N. Y. 1678	80	20⅜ x 13⅝ .92	" "		
12,	" "	" " "	"	80	20 x 13⅝ .88	" "	73	60
12,	" "	" " "	"	80	20⅜ x 13⅝ .92	" "	70	40
12,	" "	" " "	"	120	21 x 13⅝ .92	" " 12 tier, B. & C., 12.00	85	60
12,	" "	" " "	"	140	20⅞ x 13⅝ .92	" "	110	40
12,	" "					" " 13 tier, B. & C., 13.00	141	80
15,	Cleveland Desk Co.					cornice, 25.75.		
15,	" "		H. O. 1257	68	21⅝ x 16¼	panels, 40.80.		
15,	Potter county		"	34	21⅝ x 16½	R. S. case, 4 tier, carpet, base.	74	04
15,	" "	Coudersport, Pa.	1255	25	21 x 14⅝	" " 2 tier, carpet, "	37	02
15,	" "	"	"	5	20 x 14⅝	Comb. case with base.		
15,	First National bank	"	"	5	24⅞ x 14⅝	cornice, carpet.		
15,		Butte city, Mont.	C. 3404	12	24½ x 15⅞ 1.15	" " "		
16,						Comb. case, 2 tier, carpet, .50	14	30
16,		Pittsburg	1056	7	20⅝ x 13⅝	cornice, 2.50.		
16,		New York		32	11¼ x 16	" " carpet & base.		
19,		" "				" " cornice.		
20,		Pittsburg	1051	12	20⅝ x 13⅝	panels, 22.18.		
20,	Snyder county	Middleburg, Pa.		14	20⅝ x 14, F. B.	Comb. case with base.		
20,	" "	"		7	18⅝ x 14, F. B.	" "		
20,	" "	"		28	18⅝ x 14, F. B.	" "		
20,	" "	"		7	16¼ x 14, F. B.	" " } 3 tier, carpet	102	30
20,	" "	"		28	18⅝ x 14, F. B.	" "		
20,	" "	"		7	16¼ x 14, F. B.	" " } 3 tier, carpet	102	30
20,	" "	"		14	18⅝ x 14, F. B.	" "		
20,	" "	"		7	14½ x 14, F. B.	" "		
24,	New Minot					Panels, 20.94; cornice & base, 21.50.		
29,		Boston, Mass.	B. 1167	18	25⅛ x 18 1.45	Shelf case, 1 tier, B. & C., 1.25	27	35
29,		New York		20	20½	Comb. case.		
30,	Second Nat. bank	Cooperstown, N. Y.	1714	20	20⅝ x 18½ 1.23 4 panels, Dp.	B. C., 1 tier, B. & C., 1.00, 4" base.	25	60

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Sept. 30, 1892	First Nat. bank	Cooperstown, N. Y.	1715	20	21⅝ x 18¼	1.27	B. C., 1 tier, B. & C., 1.00, 4" base	26 40
Oct. 7,	W. Wythe		1271	21	26¾ x 12⅝		Comb. case, carpet, & cornice.	
10,	County clerk	San Bernardino, Cali..	C. 3493	44	21¼ x 13⅝	.92	" " 2 tier, carpet, .50	42 74
10,	" " "	" " "					cornice, 4.00.	
15,	City clerk	Bayonne, N. J.	1704	14	21 x 25½, 5 R.	1.77	Comb. case, 2 tier, carpet, .50	25 28
15,	" "	" "	"	44	22¼ x 16¼	1.03	4 tier, carpet, 2.00	47 32
15,	" "	" "	"	77	20⅝ x 13⅝	.92	" "	70 84
15,	" "	" "	"				cornice, 20.75; panels, 12.00.	
440				812* 21,003*				
Oct. 15, 1892		Pittsburgh	1089	4	21 x 15⅝		Comb. case, 6" base, 1 tier, carpet.	
19,		"	1095	4	21 x 13⅝		" " " " "	
21,			W. 1244	3	20⅝ x 15½		" " 1 tier, base & carpet.	
21,							Cornice, 3.15; panels, 2.97.	
24,		Phila.	1556	2	20⅞		Comb. case, panels.	
25,	Traders' Ins. Co.	Hartford, Ct.	1702	12	19¼ x 24	1.52	" " 3 tier, carpet, .75	18 99
25,	" " "	"	"	8	23 x 24	1.82	" " 2 tier, B. & C., 2.50	17 06
25,	" " "	"	"	7	15 x 24	1.38	" " 1 tier, B. & C., 1.25	10 91
25,	" " "	"	"	2	18 x 17	1.25	" " 1 tier, carpet, .25	12 75
25,	" " "	"	"				cornice, 18.70.	
25,	N. Jersey Title & Guar. Co.	Camden, N. J.		144	19¾ x 16	.91	Comb. case	131 04
26,	" " "	"		144	19¼ x 16	.91	" "	131 04
26,	" " "	"		36	16⅞ x 21	1.26	" " 9 tier, B. & C., 9.00	54 36
26,	" " "	"					panels, 6.20.	
26,	Orange county	Orlando, Fla.		102	21⅛ x 13⅝	.96	R. S. case, 6 tier, B. & C., 6.00; cornice, 6.40.	110 32
29,	" "	"		72	21⅛ x 13⅝	.96	" 4 tier, B. & C., 4.00; cornice, 4.30.	77 42
29,	" "	"		198	21⅛ x 13⅝	.96	" 11 tier, B & C., 11.00; cornice, 11.75.	212 83
29,	County clerk	Freehold, N. J.	1712	60	19⅛ x 13⅝	.88	Comb. case, 3 tier, B. & C., 3.00	55 80
31,	" "	"	"	100	19⅛ x 13⅝	.88	" " 5 tier, B. & C., 5.00	93
31,	" "	"	"	12	21⅝ x 13⅝	.96	" "	11 52
31,	" "	"	"	80	18¾ x 13⅝	.88	" " 4 tier, B. & C., 4.00	74 40
31,	" "	"	"	110	18 x 13⅝	.88	" " 5 tier, B. & C., 5.00	101 80
31,	" "	"	"	88	19 x 13⅝	.88	" " 4 tier, B. & C., 4.00	81 44
31,	" "	"	"				cornice, 23.30.	
31,	" "	"	"				panels, 51.75.	
Nov. 4,	Texas Prtg. & Litho. Co.	Fort Worth, Tex.	C. 3579	6	20⅝ x 12½	.92	Comb. case, 2 tier, B. & C., 2.00	7 52
4,	" " "	"	"				cornice, 2.10.	
5,	Senate library	Harrisburg, Pa.		12	20 x 13⅝	.88	" " 3 tier, carpet, .75	11 31
5,	" "	"		24	23⅛ x 23½		" " 4 tier, carpet, 1.00	32 20
5,	" "	"					cornice, 16.12.	

	7,	Sup't of public instruction	Annapolis, Md	1277	3	21¼ x 13⅝	2.50	Comb. case.	
	7,	" " " "	"	"	3	29⅝ x 13⅝	3.00	" " panels & cornice.	
	"	Washington county	Hillsboro, Ore	C. 3543	34	28⅝ x 13⅝		Omnibus, panels, base & carpet	69 84
	14,	City treasurer	Lewiston, Me	1194	16	17½ x 13⅝		Comb. case.	
	14,	City clerk	Springfield, Ohio	19	6	18 x 13⅝		" " 1 tier, carpet.	
	14,	" "	" "	"	6	18¼ x 13⅝			13 87
	14,	" "	" "	"	2	23⅝ x 18		" " 2 tier, B. & C., 1 P. H. cornice, 3.40	23 66
	14,	" "	" "	"	2	23⅝ x 18			
	25,	" "	" "	N. Y. 1694	20	21¾ x 13⅝		Comb. case, 2 tier, carpet, .50	20 20
	25,	" "	" "	"	14	21⅝ x 13⅝		" " 2 tier, carpet, 6 P. H	18 96
	25,	" "	" "	"		1			
	25,				11	20¼ x 17½		" " 2 tier, carpet, .50	26 67
	25,				11	15⅜ x 17½			
	25,				74	19⅜ x 13⅝		" " 4 tier, carpet, 1.00 cornice & panels.	65 12
	25,								
					22,435*				
441					915*				
					22,435*				
Nov.	26, 1892	Farmers' & Manufacturers' bank	Poughkeepsie, N. Y.	N. Y. 1723	6	20⅝ x 20½		Omnibus, 3 tier, carpet.	
	29,	Northumberland county	Sunbury, Pa	1283	42	19⅜ x 13⅝	.88	Comb. case.	36 96
	29,	" " "	"	"	42	19¾	.88		
	29,	" " "	"	"	88	19¾ x 13⅝ F. B., 29"	1.63	" " 12 tier, carpet, 3.00	39 96
	29,	" " "	"	"	14	19⅝ x 13⅝	.88	" " 11 tier, B. & C., 16.50	159 94
	29,	" " "	"	"	35	19¾ x 13⅝	.88	" "	12 32
	29,	" " "	"	"	40	21¾ x 13⅝ F. B., 29"		" " 7 tier, carpet, 1.75	32 55
	29,	" " "	"	"	49	19¾ x 13⅝	.88	" " 2 lap ledges, 5 tier, B. & C	97 45
	29,	" " "	"	"	48	19¾ x 13⅝ F. B., 29"	1.63	" " 7 tier, carpet, 1.75	44 87
	29,	" " "	"	"	30	18¾ x 6	.95	" " 6 tier, B. & C., 9.00	87 24
	29,	" " "	"	"	30	18⅞ x 16	.95	" "	28 50
	29,	" " "	"	"	112	20⅝	.96	" " 4 tier, B. & C., 4.00	32 50
	29,	" " "	"	"	36	22 x 14½	1.00	Desk counter, 14 tier, B. & C., 14.00	121 52
	29,	" " "	"	"	4	23⅝ x 14½	1.08	Comb. case	36 00
	29,	" " "	"	"	8	20 x 14½	.92	" " 10 tier, carpet, 2.50	6 82
	29,	" " "	"	"	12	20⅝ x 14½	.96	" "	7 36
	29,	" " "	"	"				" " 5 tier, carpet, 1.25 cornice, 56.35. panels, 47.86.	12 77
	29,	" " "	"	"					
	30,	Pueblo county	Pueblo, Colo	C. 3626	128	24⅝ x 21½	1.55	4 cases, 8 tier, B. & C., 8.00	206 40
	30,		Pittsburg	1153	32	20⅝ x 34½		2 cases, 2 tier, B. & C	85 64
Dec.	3,	Wm. Wythe	Toronto			27⅝ x 18½, 4 R. Dp		14 "	
	5,	Montgomery county	Norristown, Pa	1558	9	19⅝ x 13⅝	.83	Comb. case	7 47
	5,	" " "	"	"	9	20⅝ x 13⅝	.87	" " 2 tier, B. & C., 2.00	9 83
	5,	" " "	"	"	3	20¾ x 19½		" "	
	5,	" " "	"	"	24	20½ x 14½	.96	" " 3 tier, B. & C., 3.00 cornice, 3.65.	26 04
	5,	" " "	"	"					
	5,	Traders' National bank	Lowell, Mass	1226	12	20 x 13⅝		Comb. case.	
	7,	County clerk	La Junta, Colo	C. 3625	20	20 x 13⅝		Omnibus, 2 tier, B. & C.	39 90
	7,	" " "	"	"	7	21¾ x 13⅝		" 1 tier, B. & C., 7 Lang. files	
	9,	Worcester 5c. svgs. bank	Worcester, Mass	1210	88	19⅝ x 13⅝		Comb. case, 4 tier, B. & C.	
	9,	Geo. D. Harter bank	Canton, Ohio	1183	12	20¼ x 13⅝		" " 6 " base.	

[* In pencil in copy.]

THE O. S. MFG. CO. VS. F. M. MFG. CO.

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Dec. 16, 1892	Schenectady bank	Schenectady, N. Y.	1791	16	39 x 15⅝	Comb. case.	
16,	" " "	"	"	9	22⅝ x 16	" " 3 tier, carpet. cornice, 3.65.	
16,	" " "	"	"				
17,	County recorder	San Diego, Cali.		21	26⅞ x 20, 4 R. 1.50	Comb. case, 3 tier, B. & C., 3.75	35 88
17,	" " "	"		14	26⅞ x 20, 4 R. 1.53	" " 2 tier, B. & C., 2.50	23 92
17,	" " "	"		42	26⅞ x 20, 4 R. 1.53	" " 6 tier, B. & C., 6.00	70 26
17,	" " "	"				Panels, 8.16; 4 book stalls, 6.00.	
17,	W. Wythe	Toronto, Ont.		4		Omnibus.	
17,	" " "	"		8		"	
17,	" " "	"		10		"	
17,	" " "	Tacoma, Wash.	C. 3660	10	21 x 13⅝, F. B.	" 2 tier, carpet.	
17,	Union Svgs. Bank & Trust Co.	Riverside, Cali.		20	24⅞ x 15⅞	Comb. case, 2 tier, B. & C., 2.00; cornice, 8.12	25 00
19,	First Nat. bank			23,529* 915* 23,529*			
442							9 68
Dec. 19, 1892	Bent county	Las Animas, Colo.	C. 3629	11	13⅞ x 13⅝ .88	Comb. case	50 53
19,	" " "	"	"	56	19⅞ x 13⅝ .88	" " 8 tier, carpet, 1.25	19 00
19,	" " "	"	"	10	26⅝ x 21 1.65	" " 2 " B. & C. cornice, 6.95.	
19,	" " "	"				" "	66 40
20,	Floyd county	Prestonburg, Ky.	15	80	20 x 13⅝ .83	" " 11 tier, carpet, 2.75	40 10
20,	" " "	"	"	45	17⅞ x 13⅝ .83	" " 8 tier, carpet, 2.00	68 40
20,	" " "	"	"	80	19⅝ x 13⅝ .83	" " 3 tier, carpet, .75 cornice, 21.20.	38 10
20,	" " "	"	"	45	17⅞ x 13⅝ .83		
20,	" " "	"	"				
22,	Everett Wadden Co.	Roanoke, Va.	1298	26	19¼ x 13⅝	Comb. case, 2 tier, carpet.	
22,	" " "	"	"	10	26⅛ x 13⅝	" " 1 tier, B. & C.	
22,	" " "	"	"	8	26⅝ x 13⅝	" "	
22,	" " "	"	"	8	26⅝ x 13⅝	" " 2 tier, B. & C. cornice, panel, 13.15.	
22,	" " "	"	"				
22,	Geo. S. West	Camden, N. J.	1630	32	20 x 13⅝ .88	R. S. case, 2 tier, B. & C., 2.00. cornice, 2.75; panel, 5.53	38 44
23,	" " "	"	"				
23,	First Nat. bank	Durango, Colo.	C. 3681	24	21⅝ x 13⅝ .96	Comb. case, 2 tier, carpet, .50 cornice, 7.00.	23 54
24,	" " "	"	"				
24,	Appomattox Co.	Appomattox C. H., Va.	1302	36	19¾ x 13⅝	Comb. case, 4 tier, carpet, cornices.	
27,	" " "	"	"	5	20⅝ x 18	Desk, cornices, 1 tier, B. & C.	
27,	Equitable Assurance Society	Portland, Ore.		15	21⅛ x 16	Comb. case, 1 tier, carpet.	
27,	County clerk	Los Angeles, Cali.		26	20⅝ x 13⅝ .92	Comb. case, 2 tier, B. & C., 2.00 cornice, 6.95; panels, 11.31.	25 92
28,	" " "						
28,	Citizens' Nat. bank	Martinsburg, W. Va.	1309	7	20⅝ x 13⅝	Comb. case.	

1893			" "	Washington, D. C		11	20⅝ x 13⅜		" " 2 tier, carpet.	
	30,					5	20⅝ x 13⅜		Sample.	
	31,		County clerk	New Brunswick, N. J.		5	25⅝ x 13⅜		" "	
	31,		" "			39	21⅝ x 18, 4 R	1.29	Comb. case, 3 tier, B. & C., 3.75	54 06
	31,		" "			50	20⅝ x 13⅜	.92	" " 2 tier, B. & C., 2.00; cornice, 15.35.	48 00
	31,		" "						" " panels, 29.07.	
Jan.	4,	1893	City clerk	Burlington, Vt	1268	51	19⅝ x 13⅝	.88	" " 3 tier, B. & C., 3.00	47 88
	4,		" "		"	34	20⅛ x 13⅜	.92	" " 2 tier, B. & C., 2.00; cornice, 6.45.	33 28
	4,		" "		"					
	4,		Laurens county	Dublin, Ga	1320	56	21⅛ x 13⅝		Comb. case, 4 tier, B. & C., 4.00; cornice, 2.65; panel, 6.29.	57 76
	4,		" "		"					
	4,		" "		"					
	4,			Pittsburg	1209	8	20⅞ x 13⅝		2 comb. cases.	
	25,		County clerk	Elmira, N. Y	1331	32	20⅛ x 13⅜	.92	B. C., 2 tier, B. & C., 2.00; cornice, 2.05	33 49
	31,			Pittsburg	1261	4	21 x 13⅜		Comb. case.	
	31,		A. B. Richardson	Pocatello, Idaho	13	9	20⅝ x 13⅜		" "	
	31,		Clerk of court	Newburn, Va	1320	21	20⅝ x 13½, F. B., 1.22		" "	25 62
	31,		" "		"	6	20⅝ x 13½, F. B., 1.53		" " 4 tier, B. & C., 5.00	14 18
	31,		" "		"	6	24⅝ x 14, F. B ... 1.38		" "	8 28
	31,		" "		"	21	20⅞ x 13⅝ F. B., 1.22		" " 4 tier, B. & C., 5.00; cornice, 13.15.	30 62
						24,411*				
443						716*				
						24,411*				
Jan.	31,	1893		Pittsburg	1242	18	19⅝ x 13⅝		Comb. case, 2 tier, carpet.	
Feb.	7,		Yamhill county	McMinnville, Ore	30	9	21½ x 13⅜	.96	" "	8 64
	7,		" "		"	60	20⅝ x 13⅜	.92	" " 5 tier, B. & C., 5.00; cornice, 5.30.	60 20
	7,		Mercer county	Ingleside, W. Va	1344	36	20⅝ x 13⅜	.92	R. S. case, 3 tier, B. & C., 3.00; cornice, 6.46.	42 58
	7,		" "		"	24	20⅝ x 13⅜	.92	" 2 tier, B. & C., 2.00; cornice, 4.38.	28 46
	25,			Pittsburg	1275	4	21 x 13⅜		Comb. case, 1 tier, carpet.	
	28,		Yates county	Penn Yan, N. Y	1345	25	15⅝ x 13⅝	.88	B. C.	22 00
	28,		" "		"	50	20 x 13⅝	.88	" 3 tier, B. & C., 3.00; carpet, 2.80	49 80
	28,		Howard county	Ellicott City, Md	1348	20	20⅝ x 13⅜	.92	" comb. case	18 40
	28,		" "		"	40	18¾ x 13⅝	.88	" " " 6 tier, B. & C., 6.00	41 20
	28,		" "		"	36	20⅞ x 13⅜	.92	" " "	33 12
	28,		" "		"	24	20¾ x 13⅜	.92	" " " 5 tier, carpet, 1.25; cornice, 11.15.	23 33
	28,		" "		"					
	28,		Bank of Montclair	Montclair, N. J	1989	7	19⅝ x 13⅝	.88	Comb. case	6 16
	28,		" "		"	14	18⅝ x 13⅝	.88	" "	12 32
	28,		" "		"	7	17⅝ x 13⅝	.88	" " 4 tier, B. & C., 4.00; cornice, 3.70.	10 16
	28,		" "		"					
Mar.	4,		Las Animas county	Trinidad, Colo	C. 3830	72	20⅝ x 13⅜	.92	Comb. case, 6 tier, B. & C., 6.00	72 24
	6,		Wayne county	Wayne, W. Va	1290	108	20⅝ x 13⅜	.92	" " 6 tier, B. & C., 6.00	105 36
	6,		" "		"	108	20⅝ x 13⅜	.92	" " 6 tier, B. & C., 6.00; cornice, 23.95.	105 36
	17,		Five-cent savings bank	Lynn, Mass	1355	20	20 x 13⅜	.88	B. C., 1 tier, B. & C., 1.60; panel, 6.63	25 23
	17,		S. Freeman & Son	Racine, Wisc	C. 3758	14	21 x 13⅜		Comb. case, 3 tier, carpet, cornice.	

[* In pencil in copy.]

THE O. S. MFG. CO. VS. F. M. MFG. CO.

11366

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Mar. 21, 1893	Record office	City of Baltimore		156	20⅝ x 16 ..... .99	Dbl.-faced B. C., 6 tier, B. & C., 6.00. Panels, 26.52; cornice, 9.55	196 51
"	" "	" "		120	18⅝ x 14½ ..... .83	Dbl.-faced B. C., 6 tier, B. & C., 6.00. Cornice, 8.55; panels, 26.52.	
"	" "	" "				Curtain rods & attachments on cornice, 6.00.	146 67
25,	Baltimore Trust & Guarantee Co.	Baltimore, Md.		6	20⅝ x 13⅝, F. B.	Comb. case, panels, 30.14; cornice, 9.80.	
25,	" " "	"		24	20⅝ x 13⅝	Omnibus, 2 tier, B. & C., panels, 8.50.	40 10
28,	Clinton county	Plattsburgh, N. Y.	1353	20	21 x 13⅝	Comb. case.	
30,	Bank of Wheeling	Wheeling, W. Va.	1318	7	22⅝ x 13⅝	" "	
30,	" "	"		7	20⅝ x 13⅝	" " 1 tier, carpet.	
Apr. 11,	Secretary of state	Augusta, Me.	1339	8	17½ x 11	B. C., 4 tier, carpet; cornice, 12.76	24 82
18,	Five-cent svgs. bank	New Bedford, Mass.		28	17½ x 20	Comb. case, 2 tier, carpet.	
21,		N. Y.	1927	108	22⅞ x 25½, 5 R.	2 B. C., 18 tier, B. & C.	
24,	Somerset county	Somerset, Pa.	1319	8	24½ x 14⅝ 1.13	Comb. case	9 04
24,	" "	"		34	20⅝ x 14⅝ ..... .99	" " {2 tier, B. & C., 2.00 / 1 tier, carpet, .25..}	35 91
24,	" "	"		15	21 x 14½	" "	14 85
24,	" "	"		10	21¼ x 14½	" " 5 tier, carpet, 1.25. cornice, 18.70. panels, 19.22.	11 15
24,	" "	"					
24,	" "	"					
24,	Knights of the Maccabees	Port Huron, Mich.		10	21 x 13⅝ ..... .92	Comb. case, 1 tier, carpet, .25	9 45
24,	" " "	"		17	25⅝ x 20 ..... 1.49	" " 1 tier, B. & C., 1.25	26 58
24,	" " "	"		12	20⅝ x 14, F. B.... 1.22	" " 1 tier, B. & C., 1.00	15 64
				25,697*			
444				814*			
				25,697*			
Apr. 24, 1893	Knights of the Maccabees	Port Huron, Mich.		36	21⅜ x 13¾ ..... .96	Comb. case, 2 tier, carpet, 2.00	36 56
24,	" " "	"		39	21⅜ x 13⅝ ..... .96	" " 3 tier, carpet, 3.00	40 44
24,	" " "	"		12	21⅜ x 13⅝ ..... .96	" " 1 tier, carpet, 1.00	12 52
24,	" " "	"		12	22½ x 17	2 B. C., 2 tier, B. & C	60 47
24,	" " "	"				Cornice, 50.16; panels, 38.69.	
28,	Pope Mfg. Co.	Hartford, Ct.		18	22⅝ x 14½ 1.07	Comb. case, 3 tier, carpet, .75. cornice, 7.19.	20 01
28,	" "	"					
29,	Society for Savings	Hartford		6	28⅝ x 14½ 1.36	" " 2 tier, B. & C., 2.00	10 16
29,	" "	"		60	28⅝ x 15 ..... 1.12	" " 5 tier, B. & C., 5.00	72 20
29,	" "	"		120	22½ x 15 ..... 1.12	" " 10 tier, B. & C., 10.00	144 40
29,	" "	"		72	21⅛ x 15 ..... 1.08	" " 6 tier, B. & C., 6.00. panel, 5.36.	83 76
29,	" "	"					
May 3,		Pittsburg	1347	24	20⅝ x 16	Comb. case, 2 tier, carpet.	
5,		"	1361	12	22⅝ x 15⅝	" " 2 tier, carpet.	

5,	Dollar savings bank	Painesville, Ohio		20	21⅝ x 13⅜	" " 2 tier, carpet.	
5,	County clerk	Los Angeles, Cali		57	19⅝ x 14½ .87	" " 3 tier, B. & C., 3.00	52 59
5,	" "	" "		16	24⅝ x 16, F. B. 1.75	" "	28 00
5,	" "	" "		16	40⅝ x 27½ 3.64	" "	58 24
5,	" "	" "		16	42⅝ x 27½ 3.76	" " 3 tier, carpet, .50	61 66
5,	" "	" "	"			cornice, 9.10.	
5,	Union savings bank	San José, Cali	"53	12	20⅝ x 13⅜ .92	panels, 18.43.	
5,	" "	" "		12	20⅝ x 16 .99	Comb. case	11 04
5,	" "	" "		6	21 x 13⅜, F. B.	" " 2 tier, carpet, .50	12 38
5,	" "	" "		6	24⅝ x 13⅜, F. B.	Omnibus.	
5,	" "	" "				" 2 tier, B. & C.	
9,	Recorder's office	Ogden, Utah	C. 3898	75	19¼ x 13½ .88	" cornice, 8.85.	
9,	" "	"	"	9	36⅞ x 21½ 2.23	" panels, 15.44.	
9,	" "	"	"	20	18¾ x 13⅜, F. B. 1.56	Comb. case, 3 tier, B. & C., 3.00	69 00
9,	" "	"	"	25	21⅝ x 13⅜ 1.63	" " 1 tier, carpet, .50	20 57
9,	" "	"	"	25	19⅝ x 12½ .88	" " 2 tier, B. & C., 2.00	33 20
9,	" "	"	"			" "	25 75
15,		Pittsburgh		4	21 x 13⅜	" " 2 tier, B. & C., 2.00	24 00
18,	El Paso County bank	Colorado Sp'gs, Colo	C. 3924	12	23⅝ x 13⅜ 1.04	cornice, 12.20.	
18,	" " "	"	"	12	16½ x 13⅜ .88	panels, 30.53.	
18,	" " "	"	"	12	19¾ x 13⅜	Comb. case, 1 tier, carpet.	
18,	" " "	"	"	12	19⅞ x 13⅜ .88	" " 1 tier, carpet, .25	12 73
18,	" " "	"	"	11	19⅞ x 13⅜ .88	" "	10 56
18,	" " "	"	"	5	20⅝ x 19½	" " 2 tier, carpet, .50	11 06
19,	County auditor	Little Falls, Minn	C. 3914	16	20⅝ x 13⅜ .92	" "	10 56
19,	" "	Port Angeles, Wash	"82	54	21⅛ x 13⅜ .96	" " 2 tier, carpet, .50	10 18
19,	" "	"	"			" " 1 tier, B. & C.	11 72
						cornice, 7.70.	
						B. C., 1 tier, B. & C., 1.00; cornice, 1.05	16 77
						Comb. case, 3 tier, B. & C , 3.00	54 84
						cornice, 3.20.	
445				26,561*	(11 and 12.)		
				68*			
				25,561*			
May 23, 1893	San Luis Obispo county	San Luis Obispo, Cali	No. 66	35	19¼ x 13⅜ .88	Comb. case, 7 tier, carpet, 1.75	32 55
23,	" "	" " "	"	5	24½ x 16 1.15	" "	5 75
23,	" "	" " "	"	5	22½ x 16 1.07	" "	5 35
23,	" "	" " "	"	5	19⅝ x 16 .95	" " 3 tier, carpet, .75	5 50
23,	" "	" " "	"	30	19⅝ x 13¾ .88	" " 6 tier, carpet, 1.50	27 90
23,	" "	" " "	"			cornice, 20.20.	
24,	Nat. Benevolent Ass'n	Minneapolis, Minn	C. 3915	12	14⅝ x 17½ 1.05	panels, 19.74.	
24,	Home savings bank	Phœnix, Ariz	No. 105	4	20⅝ x 13⅜	B. C., 1 tier, carpet, .25; cornice, 2.15	15 60
24,	" " "	"				Comb. case, 1 tier, carpet.	
24,	Chemical Nat. bank	Chicago, Ills		24	21¼ x 13⅝, sample	panels.	
25,	C. J. Hibbard	Minneapolis, Minn		8	21 x 13⅜ .92	Comb. case, 3 tier, carpet, panels.	
29,	Comptroller's office	Annapolis, Md	1313	36	22 x 20½ 1.38	" " 1 tier, carpet, .25	7 61
29,	" "	"	"	10	26⅜ x 20½	" "	49 68
29,	" "	"	"			" " 8 tier, B. & C., 10.00	25 80
						cornice, 10.65.	

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
						panels, 14.11.	
May 29, 1893	Comptroller's office	Annapolis, Md.	1313				
31,	Amador county	Jackson, Cali.	101	96	20⅝ x 13⅝ .92	Comb. case, 6 tier, B. & C., 6.00	94 32
31,	" "	"	"	33	21⅛ x 13⅝ .96	" "	31 68
31,	" "	"	"	22	21 x 13⅝ .92	" " 5 tier, B. & C., 5.00	25 24
31,	" "	"	"	5	20⅝ x 13⅝ .92	" " 1 tier, carpet, .25	4 85
31,	" "	"	"	96	20⅝ x 13⅝ .92	" " 6 tier, B. & C., 6.00	94 32
31,	" "	"	"	18	20⅝ x 13⅝ .92	" " 3 tier, B. & C., 3.00	19 56
31,	" "	"	"	30	20 x 13⅝ .88	" " 5 tier, carpet, 1.25	27 65
31,	" "	"	"	44	25 x 30 2.28	" " 4 tier, B. & C., 6.00	106 32
31,	" "	"	"	70	20⅝ x 13⅝ .92	" " 5 tier, B. & C., 5.00	69 40
31,	" "	"	"	14	21 x 13⅝ .92	" " 1 tier, B. & C., 1.00	13 88
						cornice, 59.10.	
						panels, 133.87.	
31,	Suffolk Co. Nat. bank	Riverhead, N. Y.		5		Omnibus, 12 check-files	112 68
				27,168*	O K (O K) (13th street, 14th).		
June 5, 1893	Paxton & Gallagher	Omaha, Neb.	C. 67	3	23¾ x 18	B. C.	7 80
5,	Register of deeds	Worcester, Mass.	No. 20	60	17⅞ x 12½	" 3 tier, B. & C., cornice	60 90
9,	Russell B. Harrison	New York city	No. 21	12	21⅛ x 13⅝	Comb. case, 1 tier, carpet.	
9,	" "	"	"			panels & cornice.	
10,	Putnam county	Palatka, Fla.		51	19⅝ x 12½	B. C., 3 tier, B. & C., 3.00	47 88
12,	City treasurer	Sioux City, Iowa		24	20⅝ x 18	Omnibus, 2 tier, B. & C.	43 27
13,	Winnebago county	Oshkosh, Wis	C. 3800	180	19⅛ x 13⅝ .88	R. S. case, 9 tier, B. & C.	
13,	" "	"	"	80	20⅝ x 13⅝ .92	" " 4 tier, B. & C.	
13,	" "	"	"	40	20⅝ x 13⅝ .92	" " 2 tier, B. & C.	
13,	" "	"	"			with cornice & panels	314 79
15,	Washington county	Washington, Pa.	1352	63	20¾ x 13⅝ .92	Comb. case, 9 tier, carpet, 2.25	60 21
15,	" "	"	"	72	20½ x 14, F. B., 30" 1.72	" " 9 tier, B. & C., 13.50	137 34
15,	" "	"	"	45	19½ x 13⅝ .88	3 tier, B. & C., 3.00	42 60
15,	" "	"	"	26	20 x 13⅝ .88	2 tier, carpet, 50	23 38
15,	" "	"	"			cornice, 21.95.	
15,	" "	"	"			panels, 15.55.	
16,	Auditor Clay county	Spencer, Iowa		44	20⅝ x 13⅝ .92	Comb. case, 3 tier, B. & C., 3.01; cornice, 3.15.	43 48
446				700*			
				615*			
				700*			
June 16, '93	Lafayette county	Oxford, Miss.		12	20⅞ x 16	Desk, 4 tier, B. & C.	
16,	Royal Templars of Temp.	Buffalo, N. Y.		8	20⅝ x 16½	B. C., 1 tier, carpet, 1 box drawer	13 61
20,		Pittsburg		9	22½ x 13⅝	Comb. case, 1 tier, carpet.	

20,			"		8	20⅝ x 13⅝		" " 1 tier, carpet.	
22,	City auditor		Cambridge, Mass.		15	18⅞ x 13⅝		" " 3 tier, carpet.	
22,	" "		"		15	17½		" " 3 tier, B. & C. panel.	
22,	" "		"						
22,	Garrett county		Oakland, Md.		70	21¾ x 13⅝	.96	Comb. case	67 20
22,	" "		"		30	21¼ x 13⅝	.96	" " 10 tier, B. & C., 10.00	38 80
22,	" "		"		24	19 x 13⅝	.88	" " 2 tier, B. & C., 2.00	23 12
22,	" "		"					cornice, 22.10.	
22,	" "		"					panels, 17.45.	
22,	" "		"						
23,	Kings County Trust Co.		New York city		2	27⅞ x 17½		Comb. case, 2 tier, carpet, .50	7 82
23,	" "		"		3	26⅝ x 17		" "	
23,	" "		"		3	19⅝ x 17		" "	
23,	" "		"		3	26⅝ x 17		" "	
23,	" "		"		3	19⅝ x 17		" " 5 tier, carpet.	
23,	" "		"		3	26⅝ x 17		" "	
23,	" "		"		2	26⅝ x 17		" " 2 tier, carpet.	
23,	" "		"		2	26⅝ x 17		cornice, 8.10.	
23,	" "		"						
24,	" "		Pittsburg, Pa.	O. 13	16	21 x 13⅝		4 cases.	
24,			"	"	10			2 cases, 2 tier, carpet.	
27,	Alliance bank		Rochester, N. Y.	No. 8 B.	5	25 x 20½	1.50	Comb. case	7 50
27,	" "		"	"	10	20⅝ x 20½	1.22	" " 3 tier, carpet, .75	12 95
28,	Five-cent savings bank		Lynn, Mass.	37	20	17¾ x 10½	.88	B. C., 1 tier, carpet, 1.00; cornice, 4.35	18 60
30,	Pierce county		Tacoma, Wash.	No. 31	26	21⅝ x 13½		Omnibus, 2 tier, B. & C., panels, &c	57 88
30,	" "		"	"	40	20⅝ x 13⅝		2 " 2 tier, B. & C., "	91 03
30,	" "		"	"	48	26⅝ x 22½	1.34	Comb. case, 4 tier, carpet, 1.40	69 01
30,	" "		"	"	12	20⅝ x 14		" " 1 tier, B. & C., 3 book shelves	22 60
30,	" "		"	"				cornice, 53.91.	
30,	" "		"	"				panels, 141.55.	
30,	Halifax county		Richmond, Va.		126	20⅝ x 13⅝	.92	R. S. case, B. & C., cornice, panel	145 31
30,	" "		"		126	20½ x 13⅝	.92	" B. & C., cornice, panel	145 31
30,	M. A. Ballinger		Washington, D. C.		44	9	20⅝ x 18	Comb. case.	
July 6,	Montgomery county		Norristown, Pa.		19	18	21¼ x 15¾	1.03	B. C., 1 box dr. 3.50; cornice, 1.25; B. & C., 1.00	*20 79 †24 29
8,			Pittsburg			12	20⅝ x 13⅝		Comb. case.	
8,			"			6	20½ x 13⅝		" "	
10,			Washington, D. C.		W. 35	6	22¼ x 20		" " 1 tier, B. & C.	
10,	Border State bank		Baltimore, Md.			18	22⅝ x 16½		" " 2 tier, B. & C.	24 26
12,	Randolph county		Beverly, W. Va.			18	17⅝ x 24		" " 3 tier, B. & C.	32 76
12,	" "		"	"		39	18⅞ x 14⅝		" " 3 tier, carpet, .75	47 60
12,	" "		"	"		140	20⅝ x 13⅝		" " 7 tier, B. & C.	135 80
12,	" "		"	"		140	20⅝ x 13⅝		" " 7 tier, B. & C.	135 80
12,	" "		"	"					cornice, 40.10.	
12,	" "		"	"					panels, 31.26.	
						1,757*				
447						815*				
						1,757*				
July 6, 1893	Lycoming county		Williamsport, Pa.			45	19¾ x 15 F. B.	1.55	Comb. case	69 75

[* In pencil in copy.]

[† Figures erased in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
July 6, 1893	Lycoming county	Williamsport, Pa.		7	26 x 15, F. B 1.99	Comb. case, 6 tier, B. & C., 9.00	22 93
6,	" "	"		36	20⅝ x 15, F. B	" " 4 tier, B. & C., 4 lap ledges.....	86 93
6,	" "	"				cornice, 20.95.	
6,	" "	"				panels, 29.92.	
15,			N. Y. 24	3	16⅞ x 19.....	Comb. case, 1 tier, B. & C., panels and cornice.	
15,			"				
17,	Allegany county	Cumberland, Md.	No. 67	22	20⅝ x 14½..... .97	B. C., 2 tier, E. & C., 2.00; cornice, 8.87; panels, 7.45.....	39 66
17,	Metropolitan Life Ins. Co.	New York city		12	20⅛ x 15.....	2 B. C., 4 tier, carpet.....	12 38
17,	County clerk	Laramie, Wyom.		19	22⅝ x 13⅝..... 1.00	Comb. case.....	19
17,	" "	"		57	20⅝ x 13⅝..... .92	" " 4 tier, B. & C., 4.00.....	56 44
18,	Clerk of the board	Phœnix, Ariz.	26	36	19¼ x 13⅝..... .88	" "	31 68
18,	" "	"	"	36	19¼ x 13⅝.....	" " 6 tier, B. & C., 6.00.....	37 68
18,	" "	"	"	84	19¾ x 13⅝..... .88	" " 7 tier, B. & C., 7.00.....	80 92
18,	" "	"	"	48	20⅞ x 13⅝..... .92	" " 4 tier, B. & C., 4.00.....	48 16
18,	" "	"	"	12	31¼ x 20½..... 1.78	" " 1 tier, B. & C., 1.50.....	22 86
18,	" "	"	"	10	20⅝ x 13⅝..... .92	" " 2 tier, carpet, .50.....	9 70
18,	" "	"	"			cornice, 23.35.	
18,	" "	"	"			panels, 16.29.	
1–,	Maryland Title Ins. Co.	Baltimore, Md.		4	26 x 41, 10 R. Dp.....	Omnibus, 4 panels.	
24,	Power City bank	Niagara Falls, N. Y.		8	20⅝ x 16, F. P.....	" 2 tier, B. & C., 2 panels.	
25,	County recorder	Merced, Cali.	No. 42	32	20⅝ x 13⅝..... .92	B. C., 4 tier, carpet, 1.00.....	30 44
25,	" "	"	"	32	20⅝ x 14, F. B., 31".....	" 4 tier, B. C., top case cov. with carpet, cornice, 4.20; panels, 25.29.....	96 88
25,	" "	"	"				
26,	Henry Glos	Elmhurst, Illi.	130	6	28⅝ x 24.....	Comb. case, 1 tier, B. & C. cornice, 5.20.	
26,	" "	"					
26,	Fourth Nat. bank	St. Louis, Mo.	C. 3941	72	24¼ x 22, 5 R.....	Comb. case, 4 tier, B. & C., 4 P. P.....	131 24
26,	" "	"	"	12	18⅝ x 18½, 4 R... .83	" " 3 tier, carpet, .75.....	10 71
26,	" "	"	"			panel, 22.81.	
27,	First Nat. bank	Cumberland, Md.	W. 65	28	22⅝ x 16½..... 1.11	Comb. case, 2 tier, base, 2.50.....	33 58
27,	" "	"	"	28	22⅝ x 16½..... 1.11	" " 2 tier, base, 2.50.....	33 58
27,	Mutual Life Ins. Co.	New York city	56	64	22⅝ x 16..... 1.07	B. C., 4 tier, base, 5.00; 2 panels, 14.79; cornice, 6.20; cornice, 11.50.....	94 47
27,	Sussex county	Stony Creek, Va.		35	20 x 13⅝..... .88	Comb. case, 5 tier, B. & C., 5.00.....	35 80
27,	" "	"		28	20¾ x 13⅝..... .92	" " 4 tier, B. & C., 4.00.....	29 76
27,	" "	"		35	20 x 13⅝..... .88	" " 5 tier, B. & C., 5.00.....	35 80
27,	" "	"				cornice, 16.95.	
27,	" "	"				panels, 14.80.	
27,		Pittsburg		6	22 x 13⅝.....	Comb. case.	
27,		"		6	20 x 13⅝.....	" "	
				2,580*			

27,	Brown, Treacy & Co.	St. Paul, Minn.		28	21⅞ x 29	1.26	" "		37 03
27,	" " "	"		9	21⅞ x 29	1.33	" "		12 57
27,	" "	"		81	20⅝ x 29	1.29	" " 12 tier, B. & C., 14.00		124 41
27,	" "	"		18	20⅞ x 13⅝	.92	" "		17 39
27,	" "	"		27	20⅞ x 13⅝	.92	" " 5 tier, B. & C., 5.00		31 08
27,	" "	"		20	21⅛ x 21½		Omnibus, 2 tier, carp-t, top carpeted		46 38
		"		6	14⅝ x 30		Table, 1 tier, carpet, 2 P. H., box on top		48 69
							panels, 30.55.		
448							cornice, 28.14.		
				2,769*					
				2,769*					
Aug. 9, 1893	Indiana county	Indiana, Pa.		64	22x14½, F.B., 30"	1.78	Comb. case		113 92
9,	" "	"		20	17¾x12, F.B., 30"	1.68	" " 10 tier, B. & C., 15		48 60
9,	" "	"		8	21⅞x14, F.B., 30"	1.78	" "		14 24
9,	" "	"		24	19½x14, F.B., 30"	1.68	" " 4 tier, B. & C., 6.00		46 32
9,	" "	"		64	19¾x14, F.B., 30	1.68	" " 8 tier, B. & C., 12.00		119 52
9,	" "	"					cornice, 25.65.		
10,	Monmouth county	Freehold, N. J.	No. 88	110	19⅞ x 13⅝		panels, 12.87.		
10,	" "	"	"	130	19⅞ x 13⅝		Comb. case, 11 tier, B. & C., 11.00		113 19
10,	" "	"	"	60	20⅜ x 13⅝		" " 11 tier, B. & C., 11.00		113 19
10,	" "	"	"	60	20¼ x 13⅝		" "		57 96
10,	" "	"	"	100	19½ x 13⅝		" " 6 tier, B. & C., 6.30		64 26
10,	" "	"	"	60	22¾ x 13⅝		" " 5 tier, B. & C., 5.25		97 65
10,	" "	"	"	60	21¾ x 13⅝		" " 3 tier, B. & C., 3.15		66 15
10,	" "	"	"				" " 3 tier, B. & C., 3.15		63 63
10,	" "	"	"				cornice, 62.19.		
23,	Northumberland county	Sunbury, Pa.	1341	18	20 x 14	.88	panels, 89.49.		
23,	" "	"	"	40	20⅞x14, F.B., 30"	1.72	Comb. case, 6 tier, carpet, 1.50		17 34
23,	" "	"	"	3	21⅛ x 13⅝		" " 5 tier, B. & C., 7.50		76 00
23,	" "	"	"	33	17⅜ x 13⅝	.88	" " 1 tier, carpet, 3 box dr		10 54
23,	" "	"	"	98	20⅞ x 14	.92	" " 3 tier, carpet, .75		29 79
23,	" "	"	"				Counter, 14 tier, B. & C., 14.00		104 16
23,	" "	"	"				Panels, &c., for above counter, 36.50.		
23,	" "	"	"				cornice, 44.10.		
16,	County clerk	Bath, N. Y.	No. 23	184	19⅝ x 13⅝	.88	panels, 79.80.		
							2 B. C., 8 tier, cor., 8.00; cornice, 10.70;		
18,	Curwensville bank	Curwensville, Pa.		27	20⅝ x 16	.99	panels, 31.62		212 24
18,	" "	"		12	20⅝ x 16	.99	Comb. case, 3 tier, carpet, .75		27 48
18,	" "	"					" " 2 tier, carpet, .50		8 62
18,	" "	"					cornice, 4.75.		
19,	American Exchange bank	West Superior, Wis.		16	23¾ x 13⅝	.92	panels, 16.07.		
19,	" " "	"		5	3⅝ x 19½	1.69	Comb. case, 2 tier, carpet, .50		15 22
28,	Cook county	Grand Marais, Minn.		45	20⅝ x 13⅝	.92	" " 1 tier, carpet, .50		8 95
29,	Montgomery county	Norristown, Pa.	75	24	21½ x 14½	1.01	B. C., 3 tier, B. & C., 3.00; cornice, 3.15		47 55
30,	Somerset county	Somerville, N. J.	132	70	20⅝ x 13⅝	.92	" 3 tier, B. & C., 3.00; moulding, 1.20		28 44
30,	" "	"		30	20¼ x 13⅝	.92	Comb. case		64 40
30,	" "	"					" " 10 tier, B. & C., 10.00		37 00
30,	Germania Life Ins. Co.	San Francisco, Cali.		6	20⅝ x 13⅝		cornice, 10.40.		
30,	" "	"					Comb. case, 1 tier, carpet.		
30,	James Inglis	Paterson, N. J.		44	17⅜ x 13⅝	.88	cornice, 5.75.		
							B. C., 3 tier, B. & C., 2.00; cornice, .80		42 52

[* In pencil in copy.]

Exhibit "Shelves in Cases." W. B. II.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Aug. 31, 1893	First Nat. bank	Newport News, Va.		12	25⅝ x 20½	Comb. case, 1 tier, carpet.	
31,	" " "	" "				cornice, 3.95.	
31,	" " "	" "				panels, 9.46.	
Sept. 2,	Clerk of supreme court	Helena, Mont.		16	20⅞	Comb. case, 2 tier, B. & C., 2.10	18 07
2,	" " "	"				cornice, 16.23.	
2,	" " "	"				panels, 14.46.	
2,	Winona county	Winona, Minn.		23	21½ x 14	B. C., 1 tier, B. & C., cornice	25 39
449				4,215*			
				4,215*			
Sept. 14, 1893		New York		4	29⅛ x 26½	B. C., 2 tier, carpet, 14 B. stalls	58 13
15,	Security Loan & Trust Co.	Los Angeles, Cali.		3	18⅝ x 13½	B. C., 1 tier, B. & C., 2 panels	51 21
22,	Security & Trust Co.	" " "		10	20⅝ x 16	Omnibus, 2 tier, B. & C.	
25,	Lackawanna county	Scranton, Pa.	755	49	20⅛ x 12⅝, F. B., 14"	Comb. case	45 08
25,	" "	"		28	20 x 13½, F. B., 14"	" " 11 tier, carpet, 2.75	27 39
25,	" "	"		49	19¾ x 12½, F. B., 29½	" "	82 32
25,	" "	"		21	19⅝ x 12½, F. B., 29½	" " 10 tier, B. & C., 15.00	50 28
25,	" "	"		27	19⅛ x 12½, F. B., 14"	" "	23 76
25,	" "	"		27	19¼ x 12½, F. B., 14"	" " 6 tier, carpet, 1.50	25 26
25,	" "	"		27	19⅛ x 12½, F. B., 29½	" "	45 36
25,	" "	"		27	19¼ x 12½, F. B., 29½	" " 6 tier, B. & C., 9.00	54 36
25,	" "	"		21	20⅛ x 13½, F. B., 29½	" "	36 12
25,	" "	"		21	20 x 13½, F. B., 29½	" " 6 tier, B. & C., 9.00	44 28
25,	" "	"				cornice, 33.10.	
25,	" "	"				panel, 76.68.	
Oct. 11,	Union svgs. bank	San José, Cali.	103	24	25⅛ x 16½	Comb. case, 2 tier, carpet, .50	27 38
11,	" " "	" "	"			cornice, 15.45.	
11,	" " "	" "	"			panels, 11.24.	
Nov. 11,	County clerk York county	York, Neb.	C. 279	60	19¾ x 13⅝	B. C.	55 44
11,	" " " "	"	"	20	19¾ x 13⅝	" 8 tier, carpet	20 58
13,		New York		10	28¼ x 18¾	" 1 tier, carpet	16 85
18,		Tacoma, Wash.	S. F. 125	40	20⅝ x 20½	2 omnibus, B. & C., panels, &c.	110 08
24,		Portland, Ore.		14	20⅝ x 13⅞ .92	B. C., 1 tier, B & C., cornice	14 93
29,	County clerk	Fresno, Cali.		40	20⅝ x 24½, F. B., 36½	Comb. case, 5 tier, B. & C., 12.50	101 50
29,	" " "	"		40	20⅝ x 24½	" " 5 tier, carpet, 2.50	67 30
29,						cornice, 261.50.	
29,						panels, 530.36.	
29,							
Dec. 11,		San Francisco		10	18⅝ x 15½	B. C., 1 tier, B. & C.	11 03
15,	Bristol Nat. bank	Quanton, Mass.		4	23½ x 20	Comb. case, 1 tier, carpet.	
15,	" " "	"		6	20 x 14½	" " carpet.	
15,	" " "	"		5	20 x 14½		

	15,	" " "		"					
	16,	Blair county		Hollidaysburg, Pa.		5	20 x 18¼	Omnibus, carpet.	
	16,	" "		"		30	20⅞ x 13⅝	Comb. case, 3 tier, carpet, .75	28 35
	16,	" "		"		30	19¾ x 13⅝	" " 3 tier, carpet, .75	27 15
	16,	" "		"		36	21 x 12½, F. B., 29½	" "	61 92
	16,	" "		"		36	21⅛ x 12½, F. B., 29½	" " 8 tier, B. & C., 14.00	77 36
	16,	" "		"		90	19⅝ x 12½, F. B., 29½	" " 10 tier, B. & C., 17.50	168 70
	16,	" "		"		28	18⅛ x 13⅝	" "	24 64
	16,	" "		"		48	19¾ x 13⅝	" "	42 24
	16,	" "		"		40	21⅝ x 13⅝	" " 10 tier, carpet, 2.50	40 90
	16,	" "		"		63	20 x 12½, F. B., 29½	" "	105 84
	16,	" "		"		27	19⅞ x 12½, F. B., 29½	" " 10 tier, B. & C., 17.50	62 86
	16,	" "		"				cornice, 32.80.	
Jan.	3, 1894				1			panels, 92.61.	
				Phil. 201		30	24⅝ x 17½ 1.35	B. C., 3 tier, case, 25 B, stalls, panels, &	
450								cornice	100 47
						5,265*			
Jan.	4, 1894	Lackawanna county		Scranton, Pa.		5,265*			
	4,	" "		"		12	19½ x 13⅝ ..... .95¾	Comb. case, 2 tier, carpet, .50	11 06
	4,	" "		"		18	18⅞ x 14 ..... .88	" " 3 tier, carpet, 2.25	18 09
	4,	" "		"				cornice, 10.25.	
	4,	" "		"				panels, 39.51.	
	9,	Cleveland Desk Co.		Cleveland		H. O. 1436	9	19⅝ x 17	Comb. case
	9,	" "		"		"	8	23⅝ x 17	" " 2 tier, carpet } 18 38
	9,	" "		"		"	12	22⅞ x 10⅝	Omnibus, 2 tier, B. & C.
	9,	National Shoe & Leather bank		New York		N. Y. 270	4	21¼ x 20, F. B., 27"	panels, 25.20.
	9,	" "		"		"	6	20¼ x 20, F. B., 27"	2 cupboard- } 2 tier, B. & C.; panel, 10.00 64 06
	9,	" "		"		"	5	25⅝ x 20, F. B.	" 1 tier, B. & C., panel, 3.60 38 12
	10,	" "		"		"	5	25⅝ x 20, F. B.	" 1 tier, B. & C., panels, 7.20 41 72
	10,	" "		New York			24	24⅝ x 17½	Comb. case, 2 tier, carpet, .60 34 20
	10,	" "		"					cornice, 2.50.
	22,	L. S. Noyes		Garden City, Texas		C. 448	36	21 x 13⅝ ..... .92	panels, 17.50.
	22,	"		"		"	24	21⅛ x 13⅝ ..... .96	Comb. case 33 12
	22,	"		"		"			" " 5 tier, B. & C., 5.00 28 04
	24,	Municipal building		Scranton, Pa.			36	21 x 18	cornice, 5.25.
	24,	" "		"			12	20⅝ x 17	Comb. case, 6 tier, B. & C. 51 42
	24,	" "		"					" " 2 tier, B. & C., 2.00 16 28
	24,	" "		"					cornice, 50.05.
	24,	Probate judge		Farmington, Utah		C. 463	9	19 x 14	panels, 9.38.
	24,	"		"		"	2	19 x 14	Omnibus.
	24,	"		"		"	2	19 x 14	"
	25,			Pittsburgh, Pa.		67	48	20¾ x 13⅝	"
	25,			"			48	20⅞ x 13⅝	Comb. case.
	25,			"					" " 8 tier, carpet 92 48
Feb.	28,	Montgomery county		Norristown, Pa.		Phil. 211	30	18 x 15	cornice, 22.40.
	28,	" "		"		"	10	20 x 15	Comb. case.
	28,	" "		"		"	32	20¼ x 13⅝ ..... .92	" "
	28,	" "		"		"	14	20¾ x 16	" " 4 tier, B. & C., 4.00 33 44
									Cupboard, 2 tier, carpet, .50 10 86

[* In pencil in copy.]

Exhibit "Shelves in Cases." *W. B. H.*—Continued.

Date	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
						cornice, 35.45.	
Feb. 28, 1894	Montgomery county	Norristown, Pa.	Phil. 211			panels, 83.17.	
28,	" "	"	"				
17,		Philadelphia		5	20 x 13⅝	B. C., 1 tier, carpet	8 65
17,		New York city		14	23⅝ x 18¼	Omnibus, 2 tier, B. & C., panels, &c	72 72
13,	Bank of New Rochelle	New Rochelle, N. Y.	N. Y. 328	6	24¾ x 14⅝	Comb. case, 2 tier, carpet.	
13,	" "	" "	"			cornice, 4.55.	
M'ch 13,	Jonesville Mch. Co	Jonesville, Wisc	C. 545	40	20⅝ x 13⅝	B. C., 4 tier, B. & C., 4.00; cornice, 4.15	46 95
22,	Montgomery county	Fonda, N. Y.	N. Y. 430	252	20⅛ x 13⅝	Comb. case, 21 tier, B. & C	241 77
22,	" "	"	"	96	20¼ x 13⅝	" " 8 tier, B. & C	92 06
22,	" "	"	"			cornice, 32.71.	
22,	" "	"	"			panel, 6.62.	
23,	Douglas county	Roseburg, Ore		32	20 x 13⅝	B. C., 4 tier, carpet	67 49
23,	" "	"		15	24⅝ x 16, F. B	" 3 tier, B. & C., panels, 1 B. stall	
				6,136*			
451				6,136*			
M'ch 29, 1894	Beadle county	Huron, S. D	C. 549	26	19¾ x 13⅝	Comb. case, 2 tier, B. & C	26 12
29,	" "	"	"	39	19¾ x 13⅝	" " 3 tier, B. & C., cornice, 5.78	39 18
30,	G. H. Tanner	Atlanta, Ga	2340	160	20⅝ x 13⅝ .92	R. S. case, 10 tier, B. & C., 10.00	157 20
30,	"	"	"	16	20⅝ x 13⅝ .92	" "	14 72
30,	"	"	"	16	20⅝ x 13⅝ .92	" "	14 72
30,	"	"		64	20⅝ x 13⅝ .92	" " 6 tier, B. & C., 6.00	64 88
30,	"	"	"	64	20⅝ x 13⅝ .92	" " 4 tier, B. & C., 4.00	62 88
30,	"	"	"	16	20⅝ x 13⅝ .92	" "	14 72
30,	"	"	"	16	20⅝ x 13⅝ .92	" "	14 72
30,	"	"	"	64	20⅝ x 13⅝ .92	" " 6 tier, B. & C., 6.00	64 88
30,	"	"	"	32	20⅝ x 13⅝ .92	" " 2 tier, B. & C., 2.00	31 44
30,	"	"	"	32	20⅝ x 13⅝ .92	" " 2 tier, B. & C., 2.00	31 44
30,	"	"	"			cornice	48 05
30,	"	"	"			panels	47 25
Apr. 16,	Bowery savings bank		N. Y. 420	100	22⅛ x 18	Dbl. F. counter, B. & C., panels, &c	187 14
16,	" " "		"	100	22⅛ x 18	" " " B. & C., panels, &c	187 14
16,	" " "		"	50	20⅝ x 15	" " " B. & C., panels, &c	98 97
16,	" " "		"	56	20⅝ x 15½	Comb. case, 4 tier, carpet	62 41
16,	" " "		"	56	21"	4 omnibus	221 34
16,	" " "		"			Not in cornice, 85.50.	
16,	" " "		"			Omnibus, 2 counters, panels, 38.56.	
17,	Insurance commissioners	Hartford, Ct	N. Y. 1417	8	22⅞ x 16	Comb. case, 2 tier, base.	
17,		New York	N. Y. 450	†[56	21 x 18, 4 rollers	4 cases, 8 tier, carpet, panel door	190 20
17,		" "	"	10	23¼ x 24, 5 R	Case, 2 tier, carpet, panel door	43 08

17,	.....	" "	"	12	16¾ x 12½	Comb. case, }	
17,	.....	" "	"	10	18¾ x 12½	" " }-3 tier, carpet	27 80
17,	.....	" "	"	9	20¾ x 12½	" " }	
17,	.....	" "	"	2	22¾ x 23	" " 1 tier, carpet.	
17,	.....	" "	"	6	22¾ x 24	" " 1 tier, carpet.	
17,	.....	" "	"			panels, 27.18.	
23,	Probate judge	New Haven, Ct.....	N. Y. 454	30	20¾ x 13⅜	Comb. case, 3 tier, carpet	29 77
23,	" "	"	"	30	20¾ x 13⅜, F. B., 28" ..	" " 3 tier, B. & C.	57 35
23,	" "	"	"			cornice, 4.88.	
23,	" "	"	"			panels, 13.94.	
25,	.....	Pittsburg.....	P. 80	14	22 x 13⅜	Comb. case, 2 tier, B. & C.	
25,	Clerk of U. S. district court	Tacoma, Wash.....	267	5	19¾ x 14, F. B., .30.....	" " 1 tier, carpet.	
25,	" " "	"	"			cornice, 2.05.	
25,	" " "	"	"			panels, 12.90.	
30,	Centre county.....	Bellefonte, Pa.....	Phil. 300	27	19¾ x 14, F. B., 30"	Comb. case, 3 tier, B. & C., 6.30	53 93
30,	" "	"	"	27	19¾ x 14, F. B., 30"	" " 3 tier, B. & C., 6.30	53 93
30,	" "	"	"	18	21¾ x 15, F. B., 30"	" "	33 36
30,	" "	"	"	18	22¼ x 19, F. B., 30"	" " 4 tier, B. & C., 8.40	43 74
30,	" "	"	"	24	20½ x 13⅜	" " 3 tier, carpet.....	23 97
30,	" "	"	"	124	20 x 14½	" " 5 tier, B. & C., 5.25	119 83
30,	" "	"	"	65	20 x 14½	" " 5 tier, carpet, 1.30.....	66 66
30,	" "	"	"	44	20 x 14, F. B., 30"	" " 5 tier, B. & C., 10.50.	
				7,526*			
452				7,526*			
Apr. 30, 1894	Centre county.....	Bellefonte, Pa.....	Phil. 300	35	20¼ x 14½	Comb. case, 5 tier, carpet	35 12
30,	" "	"	"	16	21¾ x 14, F. B., 30"	" "	29 57
30,	" "	"	"	16	21½ x 14, F. B., 30"	" " 4 tier, B. & C.	37 97
30,	" "	"	"	21	20 x 13⅜	" " 3 tier, carpet.....	20 17
30,	" "	"	"	16	22⅜ x 13⅜	" " 2 tier, B. & C.	18 90
30,	" "	"	"			cornice, 50.05.	
30,	" "	"	"			panels, 62.46.	
May 12,	N. Y. C. & H. R. R. R.	New York city.....	556	70	31½ x 20.....	B. C., 3 tier, B. & C.	132 50
15,	Citizens' Fire Ins. Co.....	New York city.....	550	54	30½ x 25, 5 R.....	6 cases, shelves only.....	121 59
17,	Society for Savings.....	Cleveland, O.....	2646	48	19¾ x 22, 5 R.....	B. C., 6 tier, B. & C.	77 16
31,	W. Schwarzwalden & Co.....	New York city.....	N. Y. 638	20	28½ x 25½	Case of shelves, 2 tier, carpet.....	42 20
31,	" "	"	"	20	30½ x 25½	" " 2 tier, carpet.....	48 94
June 15,	.....	New York city.....	.....	64	28½ x 26.....	8 cases alike, 1 tier, carpet.....	164 28
20,	.....	Pittsburg, Pa.....	P. 95	15	20½ x 16½	Comb. case.	
20,	.....	"	"	5	18½ x 16½	" " 4 tier, carpet.	
20,	.....	"	"	2	22½ x 20.....	" " 1 tier, carpet.	
20,	.....	"	"	20	20½ x 16½	" " 4 tier, carpet.	
22,	National City bank.....	Brooklyn, N. Y.....	612	22	23¼ x 16.....	" " 2 tier, carpet.....	27 32
22,	" " "	"	"	6	20⅝ x 16.....	" " 1 tier, carpet.....	8 36
26,	C. M. Burton.....	Detroit, Mich.....	C. 758	36	19⅛ x 14½	Omnibus, 2 tier, B. & C.	47 65
27,	Indiana Nat. bank	Indiana, Ind.....	C. 793	8	21"	" ..... }	
27,	" " "	"	"	8	25"	" ..... }	58 15
28,	Westchester county.....	White Plains, N. Y.....	N. Y. 579	20	21⅝ x 18½	Comb. case, 1 tier, B. & C.	27 30
28,	" " "	"	"	180	19⅞ x 14½	" " 18 tier, B. & C.	185 22

[* In pencil in copy.]

[†Words and figures enclosed in brackets erased in copy in red ink.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
June 28, 1894	Westchester county	White Plains, N. Y.	N. Y. 579	80	19⅞ x 14½	Comb. case, 8 tier, B. & C.	82 32
28,	" "	" "	"	180	17⅛ x 13⅝	" " 6 tier, B. & C.	172 62
28,	" "	" "	"	30	17⅛ x 13⅝	" " 1 tier, B. & C.	28 77
28,	" "	" "	"	180	17⅛ x 13⅝	" " 6 tier, B. & C.	172 62
28,	" "	" "	"	90	17⅛ x 13⅝	" " 3 tier, B. & C.	86 31
28,	" "	" "	"	90	17⅞ x 14½	" " 3 tier, B. & C.	81 59
28,	" "	" "	"	60	17⅛ x 13⅝	" " 2 tier, B. & C.	57 23
28,	" "	" "	"	270	17⅛ x 14½	" " 9 tier, B. & C.	258 93
28,	" "	" "	"	88	17⅞ x 14½	" " 8 tier, B. & C.	118 82
28,	" "	" "	"	88	17¾ x 13⅝	" " 8 tier, B. & C.	118 82
28,	" "	" "	"	90	17¼ x 13⅝	" " 3 tier, B. & C.	86 31
28,	" "	" "	"	180	17⅛ x 13⅝	" " 6 tier, B. & C.	172 62
28,	" "	" "	"	570	17⅛ x 14½	" " 19 tier, B. & C.	546 63
28,	" "	" "	"	90	17⅛ x 14½	" " 3 tier, B. & C.	86 31
28,	" "	" "	"	150	17⅛ x 13⅝	" " 5 tier, B. & C.	143 85
28,	" "	" "	"	510	17⅛ x 14½	" " 17 tier, B. & C.	489 09
28,	" "	" "	"	352	17⅛ x 14½	" " 16 tier, B. & C.	342 05
28,	" "	" "	"			cornice, 351.55.	
						panels, 353.14.	
July 16, '94	City clerk	Kokomo, Ind.	C. 729	30	19⅞ x 21	Dbl.-faced case, 6 tier, B. & C.	48 83
16,	"	"	"			cornice, 9.35.	
21,	Minn. Logging Co.	Minneapolis, Minn.	825	5	24⅝ x 20	Comb. case, 1 tier, B. & C., cornice.	
				10,361*	11,361*		
453				11,361*			
			†	10,361*			
July 28, 1894	Home Life Ins. Co.	New York	N. Y. 653	4	22¾ x 14	Comb. case, 1 tier, carpet.	
28,	" "	"	"	1	23¼, 5 R	" "	
28,	" "	"	"			panels, 6.50.	
31,	Clerk of board	Phœnix, Ariz.		10	19¾ x 14¾	Comb. case, 2 tier, carpet.	13 63
31,	" "	"				cornice, 6.87.	
31,	" "	"				panels, 14.64.	
Sept. 6,		New York city	N. Y. 746	18	29⅝ x 22	2 B. C., 2 tier, carpet.	40 91
21,	Warren county	Belvidere, N. J.	" 757	24	20⅞ x 13⅝	Comb. case, 2 tier, carpet.	23 71
21,	" "	"	" "	24	20⅞ x 13⅝	" " 2 tier, carpet.	23 71
21,	" "	"	" "	24	20⅞ x 13⅝	" " 2 tier, carpet.	23 71
21,	" "	"	" "	12	20½ x 13⅝	" "	11 59
21,	" "	"	" "	48	20⅝ x 13⅝	" " 5 tier, carpet.	47 68
21,	" "	"	" "			cornice, 23.79.	
21,	" "	"	" "			panels, 46.80.	
25,	State of Maryland	Annapolis, Md.	576	16	19½ x 16	Comb. case, 2 tier, carpet.	

25,	" "	"	"	"	16	20⅝ x 20¼	" "	2 tier, B. & C.	
25,	" "	"	"	"	30	22¼ x 5, R. Dp.	" "		
25,	" "	"	"	"	18	22¼ x 4, R. Dp.	" "	8 tier, carpet.	
25,	" "	"	"	"	99	14¼ x 10	" "	9 tier, B. & C.	111 32
25,	" "	"	"	"	99	14¼ x 10	" "	9 tier, B. & C.	111 32
25,	" "	"	"	"	5	14¼ x 13⅝	" "	1 tier, carpet.	
25,	" "	"	"	"				cornice, 74.66.	
25,	" "	"	"	"				panels, 83.98.	
27,	Westchester county		White Plains, N. Y.		60	17⅛ x 14½	Comb. case,	2 tier, B. & C.	57 54
27,	" "	"	"	"				cornice, 11.73.	
27,	" "	"	"	"				panels, 3.47.	
27,	" "	"	"	"					
27,	N. Y. Underwriters' Agency		New York city	N. Y.	773	18 24⅛ x 20	R. S. case,	3 tier, carpet.	28 20
	" "	"						in wood counters.	
27,	Hanover Fire Ins. Co.		" " "	"	770	35 30⅝ x 22	5 cases in wood counter,	5 tier, carpet	68 50
27,	N. Y. Underwriters' Agency		" " "	"	772	21 30⅝ x 22½	3 cases in wood counter,	3 tier, carpet	44 88
27,	Com's McKean county		Smethport, Pa.		471	10 23½ x 14½	Comb. case,		10 92
28,	" "	"	"	"		40 19⅞ x 14½	" "	5 tier, carpet.	38 27
28,	" "	"	"	"				cornice, 15.28.	
28,	" "	"	"	"				panels, 12.92.	
Oct. 22,	Huntington county		Flemington, N. J.	N. Y.	795	45 19 x 13⅝	Comb. case,		41 58
22,	" "	"	"	"		30 18⅞ x 13⅝	" "	5 tier, B. & C.	32 97
22,	" "	"	"	"				cornice, 9.77.	
22,	" "	"	"	"				panels, 17.33.	
23,	Meriden svgs. bank		Meriden, Ct.	N. Y.	797	4 20"	Omnibus.		
Nov. 8,	Montgomery county		Fonda, N. Y.	N. Y.	822	110 20¼ x 14¾	Comb. case,	11 tier, B. & C.	117 80
8,	" "	"	"	"				cornice, 5.46.	
8,	" "	"	"	"				panels, 10.48.	
Dec. 31,	Richardson county		Falls City, Neb.	C.	1085	80 20¼ x 13⅝	Comb. case,	8 tier, B. & C.	85 68
31,	" "	"	"	"		10 21⅝ x 13⅝	" "		10 88
31,	" "	"	"	"		10 20 x 13⅝	" "	2 tier, B. & C.	11 34
31,	" "	"	"	"		14 21⅝ x 14	" "		14 11
31,	" "	"	"	"		7 20⅛ x 14	" "	3 tier, B. & C.	9 92
						† 11,303* 12,303*			
454						12,303*			
						† 11,303*			
Dec. 31, 1894	Richardson county		Falls City, Neb.	C.	1085	95 20 x 13⅝	Comb. case,	5 tier, B. & C.	92 04
31,	" "	"	"	"		76 20 x 14½	" "	4 tier, B. & C.	74 42
31,	" "	"	"	"		38 20 x 13⅝	" "	2 tier, B. & C.	37 22
31,	" "	"	"	"		100 20 x 13⅝	" "	5 tier, B. & C.	97 65
31,	" "	"	"	"		60 20 x 13⅝	" "	4 tier, B. & C.	59 64
31,	" "	"	"	"				cornice, 45.67.	
31,	" "	"	"	"				panels, 10.08.	
31,	Los Angeles county		Los Angeles, Cali.	S. F.	448	24 22½ x 13⅝	Comb. case,	3 tier, carpet	27 75
31,	" "	"	"	"		252 19⅞ x 14½	" "	14 tier, B. & C.	247 55
31,	" "	"	"	"		216 19⅞ x 14½	" "	12 tier, B. & C.	212 18
31,	" "	"	"	"		72 19⅞ x 13⅝	" "	4 tier, B. & C.	70 73
31,	" "	"	"	"		50 24⅜ x 20	" "	2 tier, B. & C.	78 22
31,	" "	"	"	"				cornice, 71.93.	

[* In pencil in copy.]

[† Figures erased in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Dec. 31, 1894	Los Angeles county	Los Angeles, Cali.	S. F. 448			panels, 98.80.	
31,	Delaware county	Manchester, Iowa	C. 1064	10	20½ x 13⅝	Comb. case, 2 tier, carpet.	10 18
31,	" "	" "	"	95	19⅞ x 14¼	" " 5 tier, B. & C.	93 03
31,	" "	" "	"	76	19⅞ x 14½	" " 4 tier, B. & C.	74 42
31,	" "	" "	"	27	20⅛ x 13⅝	" " 3 tier, B. & C.	29 24
31,	" "	" "	"	27	20⅛ x 13⅝	" " 3 tier, B. & C.	29 24
31,	" "	" "	"	36	19⅞ x 13⅝	" " 4 tier, carpet.	34 32
31,	" "	" "	"	36	19¾ x 13½	" "	33 26
31,	" "	" "	"	6	21⅞ x 13⅝	" " 7 tier, carpet.	7 89
31,	" "	" "	"	5	21⅞ x 20"	" " 1 tier, carpet.	13 23
31,	" "	" "	"	6	17 x 13⅝	" " 2 tier, carpet.	8 75
31,	" "	" "	"	52	20 x 14½	" " 4 tier, carpet.	49 10
31,	" "	" "	"	6	21⅞ x 20	" "	
31,	" "	" "	"	3	23 x 20	" " 3 tier, carpet.	17 07
31,	" "	" "	"	4	20⅝ x 16⅛	" " 1 tier, carpet.	8 14
31,	" "	" "	"	34	20"	2 omnibuses.	
31,	" "	" "	"	26	19½ x 16	2 "	
31,	" "	" "	"			cornice, 81.82.	
						panels, 102.40.	
455				12,735*	13,735*		
Sept. 11, 1893		New York		10	21⅝ x 20½	Omnibus, 2 tier, B. & C., panels.	
Jan. 3, 1894	Travelers' Ins. Co.	Hartford, Ct.		40	23⅝ x 18	D. F. case, 8 tier, B. & C., 8.00, panels, &c.	87 55
24,		New York		6	21 x 15⅝	Comb. case, 3 tier, carpet.	
Dec. 6,	Fall River county	Hot Springs, S. D.				See other list without case.	
Jan. 10, 1895	Tuolumne county	Sonora, Cali.	S. F. 450	14	19⅞ x 13⅝	Comb. case, 1 tier, B. & C., 1.00	13 32
10,	" "	" "	"			cornice, 5.55.	
10,						panels, 6.60.	
11,	Knights of the Maccabees	Port Huron, Mich.	1091	19	23⅝ x 18½	Comb. case, 1 tier, carpet, 1.30	31 22
11,	" " "	" "	"			panels, 33.11.	
12,	St. Clair svgs. bank	Port Huron	1090	6	20¼ x 13⅝	Comb. case, 1 tier, carpet	8 51
12,	" "	"	"	2	21 x 20	" "	3 30
12,	" "	"	"			cornice, 5.60.	
12,	" "	"	"			panels, 15.33.	
14,		Chicago		8	35½ x 20	Comb. case, 1 tier, carpet.	
14,		"				2 panels, 8.54.	
18,		Pittsburgh		10	20⅝ x 14½	Comb. case, 1 tier B. & C.	
18,		"				2 panels, 7.50.	
Feb. 2,	O'Brien Varnish Co.	South Bend, Ind.	1223	9	20 x 16	Omnibus.	
9,	County clerk	Thibodaux, La.	W. 871	68	19⅞ x 13⅝	Comb. case, 4 tier, B. & C., 4.00	60 44
9,	" "	"	"			cornice, 13.45.	

	9,	" "	"	"				panels, 12.82.	
	13,		Pittsburgh, Pa	Pitts. 169	11	24 x 20		Omnibus	59 28
	13,		"	"	22	20½ x 15		2 "	116 16
M'ch	6,	Norristown Title & Trust Co.	Norristown, Pa.	Phil. 669	14	20¼ x 18		Comb. case, 2 tier, carpet, .50 panel, 2.25.	17 28
	6,	" " " "		" "					
Apr.	30,	Lycoming county	Williamsport, Pa.	" 751	25	19⅞ x 13⅝		Comb. case, 5 tier, B. & C.	28 35
	30,	" "	"	"	80	20 x 13⅝, F. B. .16		Special counter	143 32
	30,	" "	"	"	16	21½ x 16		" panels, 26.00	
May	10,	E. M. Burbeck	San Diego, Cali.	S. F. 600	10	19⅛ x 14		Comb. case, cornice, 5.25	8 52
	10,	" "	"	"	10	19⅛ x 14		" " 2 tier, B. & C cornice, 6.14. panels, 12.13.	10 62
	10,	" "	"	"					
	10,	" "	"	"					
	15,	Brown county	Green Bay, Wis.	1445	51	20⅝ x 13⅝ .92		B. C., 3 tier, B. & C., 3.00; cornice, 3.15	53 07
	31,	Bank of Monongahela Valley	Morgantown, W. Va.	Pitts. 212	21	21⅝ x 16		Comb. case, 3 tier, carpet	22 32
	31,	Comptroller's office	Annapolis, Md.	W. 1135	24	14½ x 16		Special desk.	
	31,	" "	"		24	14¼ x 16		" "	
	31,	" "	"		6	14⅜ x 16		" " 9 tier, B. & C.	
	31,	" "	"		18	21¾ x 17		" " 81 tier, B. & C panels, 109.60.	72 48
	31,	" "	"						
June	14,	R. B. Lehman	Tacoma, Wash.	S. F. 624	18	22⅝ x 18½		Omnibus, 2 tier, carpet.	
July	12,	Second Nat. bank	Morgantown, W. Va.	Pitts. 225	24	20⅝ x 16		Comb. case, 2 tier, B. & C.	24 56
	22,	" "	"	" 226	8	24⅜ x 20		" " 1 tier, B. & C.	8 64
	22,	" "	"	"	8	20⅜ x 20		" " 1 tier, B. & C. cornice, 5.25. panels, 6.67.	7 04
	22,	" "	"	"					
					14,317*				
					† 13,317*				
456					14,317*				
					† 13,317*				
Aug.	8, 1895	Clerk of board of supervisors	Phœnix, Ariz.	S. F. 646	6	19¾ x 13⅝		Comb. case, 3 tier, carpet	14 02
	8,	" "	"	"	3	19⅞ x 13⅝		" "	
	8,	" "	"	"	65	19⅞ x 18		" " 5 tier, B. & C	81 00
	8,	" "	"	"	65	19⅞ x 19½		" " 5 tier, B. & C cornice, 16.15. panels, 14.50.	88 00
	8,	" "	"	"					
	8,	" "	"	"					
	8,	First National bank	Youngstown, O.	R. 3502	13	21 x 13⅝		Comb. case	37 45
	8,	" "	"	"	26	20 x 13⅝		" " 3 tier, B. & C cornice, 7.80.	
	8,	" "	"	"					
Sept.	30,	County recorder	Flagstaff, Ariz.	S. F. 692	98	20⅛ x 13⅝ .92		Comb. case	90 16
	30,	" "	"	"	10	22½ x 13⅝ .99		" " 8 tier, B. & C., 8.00 cornice, 8.25.	17 90
	30,	" "	"	"					
	30,	County clerk & recorder	Holbrook, Ariz.	S. F. 709	30	20⅝ x 13⅝ .92		Comb. case	27 60
	30,	" "	"	"	15	18⅝ x 13⅝ .88		" " 3 tier, carpet, .75	13 95
	30,	" "	"	"	30	20⅝ x 13⅝ .92		" " 2 tier, carpet, .50	28 10
	30,	" "	"	"	15	20⅝ x 13⅝ .92		" " 1 tier, carpet, .25 cornice, 21.98. panels, 35.74.	14 05
	30,	" "	"	"					
	30,	" "	"	"					
	30,	Clerk supervisors' court	Baltimore, Md.	W. 1383	120	18⅛ x 14½ .88		B. C., B. & C., 6.00; cornice, 8.15; panels, &c., 32.52	152 67

[* In pencil in copy.]

[† Figures erased in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
Oct. 10, 1895			N. Y. 1358	14	30⅝ x 24	R. S. case, carpet, panels, &c	69 82
15,		Pittsburgh	Pitts. 257	36	20 x 13⅜	Comb. case, 3 tier, B. & C	34 68
21,	Board of supervisors	Schoharie, N. Y.	N. Y. 1315	4	20¼ x 13⅜	" " 2 tier, carpet.	6 58
21,	" "	"	"			cornice, 5.25.	
21,	" " "	"	"			panels, 11.40.	
Jan. 23, 1896	Scottdale bank	Scottdale, Pa	Pitts. 303	14	20⅛ x 13⅜	Comb. case, 2 tier, carpet, .50	13 38
23,	Exchange bank	Wheeling, W. Va	" 304	6	25⅛ x 20	" " 2 " " .50	23 22
				8	22 x 16	" " 1 tier, carpet.	
23,	"	"	304	9	20 x 13⅜	" "	
23,	"	"	304	9	18⅝ x 13⅜	" " 2 tier, carpet.	
27,	County clerk	Sacramento, Cali	S. F. 764	12	20⅝ x 13⅜	" "	10 96
27,	" "	"	"	102	20½ x 13⅜	" " 10 tier, B. & C	113 13
27,	" "	"	"			cornice, 31.88.	
27,	" "	"	"			panels, 8.43.	
27,	" "	"	"	13	19⅜ x 16	" " 1 tier, B. & C.	
27,	" "	"	"			cornice, 17.80.	
27,	" "	"	"			panels, 9.54.	
Feb. 3,	Pierce county	Tacoma, Wash	828	12	21⅝ x 17	Comb. case, 2 tier, B. & C	27 09
3,	" "	"	"			cornice, 13.34.	
3,	" "	"	"			panels, 20.18.	
3,	Los Angeles county	Los Angeles, Cali	796	21	22 x 33	Comb. case	53 80
3,	" "	"		84	21¾ x 33	" "	215 20
3,	" "	"		21	22 x 33	" " 6 tier, carpet	58 53
3,	" "	"				cornice, 10.47.	
3,	" "	"				panels, 13.70.	
				14,178*			
				† 13,178*			
457				15,178*			
				† 14,178*			
Feb. 20, 1896	County clerk	Bakersfield, Cali	S. F. 855	72	20 x 13⅜	Comb. case	66 52
20,	" "	"	"	27	19⅞ x 13⅜	" " 11 tier, B. & C	36 50
20,	" "	"	"	10	24⅝ x 31	" " 1 tier, B. & C	22 26
20,	" "	"	"	9	19⅞ x 13⅜	" " 1 tier, B. & C	14 81
20,	" "	"	"	9	19⅞ x 14½	" " 1 tier, B. & C	14 81
20,	" "	"	"			cornice, 62.23.	
20,	" "	"	"			panels, 83.86.	
29,	I. C. White	Morgantown, W. Va	Pitts. 320	6	19⅜ x 13⅜	Comb. case.	
29,		"	" 320	12	20⅝ x 13⅜	" " 3 tier, B. & C	31 65
M'ch 17,			" 330	30	20⅝ x 13⅜	" " 6 tier, carpet, 1.50	27 60
31,			C. 2089	4	19⅞ x 10½	" " 1 tier, carpet	4 97

	31,	State capitol	Topeka, Kas.	C. 2010	120	20 5-6 x 15¼	" "	6 tier, carpet	126 32
	31,	" "	"	"	30	20⅝ x 13⅝	" "	1 tier, B. & C.	30 03
	31,	" "	"	"	120	20⅝ x 13⅝	" "		115 92
	31,	" "	"	"	140	20⅝ x 13⅝	" "	13 tier, B. & C. cornice, 322.89. panels, 236.10.	148 89
	31,	" "	"	"					
Ap'l	6,	Missouri Gas Co.	Kansas City, Mo.	C. 2052	30	14 x 21	Omnibus.		
	6,	"	"	"	15	15⅝ x 21	"	carpet.	
	6,	"	"	Pitts. 341	7	20⅝ x 20	Comb. case.		
	6,	"	"	"	5	23⅝ x 20	" "	2 tier, B. & C.	32 14
	6,	"	"	"	14	20⅝ x 13⅝	" "	2 tier, B. & C.	23 60
	16,	K. O. T. M.	Port Huron, Mich.	C. 2121	40	18⅞ x 13⅝ .83	Comb. case		33 20
	16,	"	"	"	16	18⅞ x 13⅝ .83	" "	7 tier, carpet, 1.75 cornice, 41.85. panel, 3.90.	15 03
	16,	"	"	"					
	16,	"	"	"					
	17,			N. Y. 1806	18	25⅝ x 20	R. S. L. case, 2 tier, B. & C., 3.12		32 57
	17,			"	16	18⅝ x 23½	" "	2 tier, B. & C., 3.00	28 69
	17,			"	96	19⅞ x 13⅝	" "	12 tier, B. & C., 12.00	101 30
	17,			"	12	33⅛ x 25	" "	1 tier, B. & C.	35 67
	20,			Pitts. 343	14	18⅝ x 13⅝	" "		
	20,			"	10	21⅝ x 13⅝	" "	3 tier, carpet	23 67
	20,			" 346	22	18⅝ x 15	Comb. case	}	33 00
	20,			"	11	23⅝ x 15	" "	3 tier, carpet }	
	27,			N. Y. 1807	19	19¾ x 24	Comb. case.		
	27,			"	36	21⅝ x 24	" "	4 tier, B. & C. panels, 26.77; cornice, 1013.	82 86
	27,			"					
	28,			N. Y. 1808	48	22⅝ x 13⅝	R. S. case, 6 tier, carpet		49 50
	29,	Boisé City Nat. bank	Boisé City, Idaho	S. F. 908	3	21⅝ x 17	Comb. case, 1 tier, carpet; cornice, 2.33		11 25
	29,	" " "	"	"	3	21⅝ x 17	" "	1 tier, B. & C.	
	30,	County clerk	Los Angeles, Cali.	S. F. 952	36	19⅞ x 13⅝	" "	2 tier, B. & C., 2.00. cornice, 18.00. panels, 12.15.	36 47
	30,	" " "	"	"					
	30,	" " "	"	"					
May	26,			N. Y. 1925	18	27⅛ x 19⅝	3 cases, 3 tier, carpet		52 47
	26,			"	15	28⅜ x 19⅝	3 " 3 tier, carpet		49 04
	29,	Winooski svgs. bank	Winooski, Vt.	B. 1013	22	23¼ x 16	1 comb. case, 2 tier, B. & C.		24 88
458									
June	11, 1896			Pitts. 371	5	20⅝ x 14⅜	Comb. case, 1 tier, B. & C. panels.		
	11,			"					
	24,			C. 2293	28	34⅝ x 27	2 cases, 4 tier, B. & C.		93 16
	24,	Barnes county	Valley City, N. D.	C. 2273	36	19⅞ x 13⅝	Comb. case, 4 tier, carpet, 1.00		32 42
	24,	" " "	"		8	19⅞ x 17½	" "	1 tier, B. & C.	
	24,	" " "	"		9	19⅞ x 13⅝	" "	1 tier, carpet	10 21
	24,	" " "	"		8	26⅛ x 20	" "	1 tier, B. & C., cornice, 8.83.	23 12
	29,			N. Y. 1994	25	19⅛ x 15	1 case, 2 tier, carpet		25 46
	29,			Pitts. 370	3	22½ x 13	1 comb. case, 1 tier, carpet.		
	29,			N. Y. 1935	10	24⅝ x 16	1 R. S. case, 1 tier, B. & C.		13 13

[* In pencil in copy.]

[† Figures erased in copy.]

Exhibit "Shelves in Cases." W. B. H.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves in case.	Size.		Cost.
June 29, 1896			N. Y. 1935	24	20⅝ x 16	1 R. S. case, 2 tier, B. & C	27 57
29,			"			Locks, 2.00; cornice, 8.66.	
29,			"			R. curt., 69.61; panels, 17.85.	
30,	Riverside iron works	Wheeling, W. Va	Pitts 376	11	20⅝ x 13⅝	Case	9 57
30,	" " "	"	"	11	17¾ x 13⅝	" 2 tier, carpet, .50	9 63
July 6,	County auditor	Los Angeles, Cali	S. F. 1030	75	24⅝ x 18	R. S. case, 3 tier, B. & C., 5.51	111 04
6,	" "	"	"	24	24⅝ x 18	" 1 tier, B. & C., 1.84	35 60
6,	" "	"	"	15	24⅝ x 16	" 3 tier, B. & C.	
6,	" "	"	"			top cov. with carpet.	38 85
6,	" "	"	"			cornice, 10.63.	
6,	" "	"	"			panels, 27.75.	
6,	" "	"	"			sliding shelves, 16.80.	
24,	State capitol	Sacramento, Cali	S. F. 1004	5	21½ x 16	Comb. case	87 83
24,	" "	"	"	20	24¼ x 19	" "	26 25
24,	" "	"	"	20	24¼ x 16	" "	26 25
24,	" "	"	"	10	23¾ x 19	" " 7 tier, carpet, 2.57	15 17
24,	" "	"	"			cornice, 92.01.	
24,	" "	"	"			panels, 187.07.	
31,	County clerk	Bakersfield, Cali	1031	16	19⅞ x 23	Comb. case, 2 tier, B. & C.	
31,	" "	"	"	10	19¾ x 13⅝	" " 3 tier, carpet	16 59
31,	" "	"	"	12	19¾ x 13⅝	" " 2 tier, carpet	13 78
31,	" "	"	"	10	19⅞ x 13⅝	" " 1 tier, B. & C	12 20
31,	" "	"	"	28	21⅝ x 14, F. back	" " 4 tier, carpet	38 09
31,	" "	"	"			cornice, 58.55.	
31,	" "	"	"			panels, 70.33.	
31,			Pitts. 381	20	20¾ x 16"	Comb. case, 2 tier, B. & C	21 90
Aug. 4,	R. B. Lehman	Tacoma, Wash	S. F. 1031½	17	23 x 16	Omnibus	55 27
24,	Ellis county	Waxahachie, Tex	C. 2554	170	19⅝ x 13⅝ .88	Comb. case, 10 tier, B. & C., 10.00	159 60
24,	" "	"	"	51	21⅛ x 13⅝ .96	" " 3 tier, B. & C., 3.00	51 96
24,	" "	"	"	8	22½ x 13⅝ 1.00	" " 2 tier, carpet, .50	8 50
24,	" "	"	"	6	25 1-16 x 13⅝ 1.12	" " 2 tier, B. & C., 2.00	8 72
24,	" "	"	"	51	19¾ x 13⅝ .88	" " 3 tier, B. & C., 3.00	47 88
24,	" "	"	"	28	22¾ x 14½ 1.00	" "	28 00
24,	" "	"	"	14	22⅞ x 14½ 1.00	" " 3 tier, B. & C., 3.00	17 00
25,	" "	"	"	102	19¼ x 13⅝ .88	" " 6 tier, B. & C., 6.00	95 76
				17,183*	16,183*		

459 Date.	Name.	Place.	Or. No.	No. shelves without case.	Size.		Cost.
Aug. 24, 1896	Ellis county	Waxahachie, Tex.	C. 2354	†17,283* †16,183* 42	20⅝ x 13⅝	Counter, 6 tier, B. & C. cornice, 56.63. panels, 97.38.	
24,	" "	"	"				
24,	" "	"	"				
27,			Pitts. 386	12	22⅝ x 16	Comb. case, 4 tier, B. & C. " " 4 open spaces cornice, 7.65.	36 06
27,			"	12	20⅝ x 16		
27,			"				
				† 16,249* 17,240*			

[* In pencil in copy.]

[† Figures erased in copy.]

460

EXHIBIT "SHELVES WITHOUT CASES." W. B. H., N. P.

Order number ——.

From Office Specialty Mfg. Co., Rochester, N. Y., U. S. A., manufacturers of labor-saving office devices.

461 Date.	Name.	Place.	Or. No.	No. shelves without case.	Size.		Cost.
Apr. 7, 1891			C. 1109	36	16"	.70 Comb. wood cab't, 12 doc., 4 Shan. lock & base	25 20
7,	This.*		C. 1087	24	21"	.75	18 00
13,				12		.70	8 40
13,				1		.70	70
20,				1	New style		70
May 11,				12		.70	8 40
11,				10		.70	7 00
11,				7	New style	.70	4 90
22,				8	20"	.70	5 60
22,				3		.70	2 10
28,	Phœnix Insurance Co.	Chicago		20	21"	.88	17 60
28,	" " "	"		10	22"	.92	9 20
June 6,	Dr. J. J. Tobin	Austin, Texas		1		.70 Sample	70
8,		Pittsburg		4	20"	.95	2 80
6,		"		10	20⅝	.70	7 00
8,		Chicago		10	20"	.70	7 00
11,		"		2	21"	.70	1 40
				32	20"	.70	22 40

* In pencil in copy.

Exhibit "Shelves Without Cases." W. B. H., N. P.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves without case.	Size.		Cost.
June 16, 1891		Boston		48	20″		33 60
26,				4	.70		2 80
July 13,				4	20″ .70		2 80
21,				24	15″ .70		16 80
21,				9	32″, 5 R. 1.70		15 30
26,				1			70
Aug. 5,				9	20⅞ .70		6 30
5,				8	20″ .70	Old style	5 60
13,	M. L. Ryder	Albany, N. Y.	C. 2644	48	30″, 4 R. Dp. 1.37		65 76
25,	Union School Furn. Co.	Battle Creek, Mich.		16	30″, 5 R. Dp. 1.60		25 60
Sept. 18,			C. 2694	12	20″ .70		8 40
Oct. 9,	Security Trust Co.	Nashua, N. H.		15	22 x 22, 5 R.		20 60
22,		[Pittsburg]†		6	22″ .78		4 68
22,	M. L. Ryder	Albany, N. Y.		6	30, 5 R.		9 60
22,	" "	"		6	28⅛, 5 R.		9 00
22,	" "	"		1	29½, 5 R., special		1 60
22,	Detroit Fire & Marine Ins. Co.	Detroit, Mich.		15	23¼ x 22½, 6 R. 1.81		27 15
Nov. 12,	Boston Library Bureau			4	27 x 20, 5 R.		5 00
12,	" " "			20	19⅝ x 20, 5 R.		17 80
28,		Chicago		15	20″		10 50
Dec. 4,				24	18″ .70		16 80
Jan. 28, '92				16	10 R. Dp., 2′ 6″ long. 2.90		46 40
30,	Equitable Aid Union	Warren, Pa.		12	15⅛		18 08
Feb. 11,	Library Bureau	Boston		4	26⅞ x 18, 5 R. 1.45		5 80
20,				12	20″ .70		8 40
M'ch 7,				18	29½, 4 R. Dp.		24 66
462				560‡			
M'ch 25, 1892	K. C. F. N. S. & M. R'y Co.	Kansas City, Mo		8	24″, 4 R. Dp. 1.07		8 56
Apr. 5,		Pittsburg		6	20″		4 35
26,				4	21½ .70		2 80
26,				4	19 .70		2 80
May 16,			B. 1061	6	20″, 5 R. 1.10		6 60
16,				17	20⅞ .70		11 90
16,				34	17¾ .70		23 80
16,				17	18¾		11 90
16,				10	34″, 5 R. Dp. 1.80		18
June 6,	Montgomery county	Norristown, Pa.		12	20″ .70		8 40
July 6,	Montgomery county	Norristown, Pa.	Phil. 1483	6	20″ .70		4 20
7,			N. Y. 1615	3	37½″ x 27½″, 7 R. 3.40		10 20
12,				23	15¾ .70		16 10

	12,			1	37″, 4 rollers			1 72
	21,		N. Y. 1655	4	21″, 4 R	1.07		4 28
Aug.	15,		C. 3381	119		.70		83 30
Sept.	29,		B. 1175	5	30¼ x 25¾, 6 R			11 40
	29,		"	10	24 x 25¾, 6 R			17 20
	29,	Belfast svgs. bank	Belfast, Me	B. 1188	5	21¼ x 15		3 70
Oct.	6,		Pittsburg		12	20″	.70	8 40
Nov.	1,		Boston		4	20″	.70	2 80
Dec.	13,			C. 3692	2	26½	.98	1 96
	14,	H. S. Maddock	Evanston, Ills		12	26″, 6 R. Dp	1.69	20 28
	22,				11	19″	.70	7 70
	22,				2	21″	.74	1 48
	22,				12	20″	.70	8 40
	22,				24		.70	16 80
Jan.	28, 1893				9	34″, 6 R. Dp	2.17	19 53
Feb.	7,			C. 3774	8	24 x 15, 4 R	1.11	8 88
	4,	New York	New York	N. Y. 1974	12	17″ x 15	.75	9 00
	13,		"	N. Y. —	4	20″, reg		2 80
	25,			1365	3	30″, 5 R. Dp	1.55	4 65
	27,		Cleveland	1360	4	20″	.70	2 80
	28,				5	15″ x 12	.70	3 50
	28,			1361				
	16,							
May	5,	County clerk	Elmira, N. Y	1381	10	20¼, reg	.74	7 40
	5,	E. L. Du Pere	Beaver Falls, Minn	" 27	6	20⅝, reg	.74	4 44
	5,			017		20″	[.70] † Out.*	
	17,		Chicago	No. 3	9	34″, 3 R. O. S. shelves	2.17	19 53
	19,	A. H. Whitmore	East Las Vegas, N. M.	No. 33	18	20″, reg	.70	12 60
	29,				2	20¼	.75	1 50
	29,				2	22″	.80	1 60
	31,				3	20″	.70	2 10
					416*			
					1,021*			
June	5,		Pittsburg, Pa		12	24″	.90	10 80
	10,			020		21″	.75 Out*	
463								
June	13, 1893	Quigley Furn. Co	Whitesboro, N. Y	49	8	25″, 5 R. Dp	1.30	10 40
			San Francisco		4	21½	.74	2 96
Aug.	17,	Otero county	La Junta, Colo		3	20″, reg	.70	2 10
	30,			S. F. 110	1	21½		78
Sept.	7,	G. W. Runkles	Madison, S. D		8	20″, reg	.70	5 60
	15,		San Francisco		35	20¼, 5 R. Dp	1.68	58 80
Oct.	9,		" "		4	20″, reg	.70	2 80
	13,			N. Y. 203	144	24⅝ x 5, R. Dp	1.12	161 28
Nov.	21,	County auditor	St. Paul, Minn		4	20⅞, 4 R. Dp	.97	3 88
	25,		San Francisco		16	25½ x 16, R. Dp	1.07	18 72
Dec.	6,		New York		1	20″	.70	70
	26,		San Francisco		8	21″, reg., 4 R	.69	5 52

[* In pencil in copy.]

[† Words and figures enclosed in brackets erased in copy.]

Exhibit "Shelves Without Cases." W. B. H., N. P.—Continued.

Date.	Name.	Place.	Or. No.	No. shelves without case.	Size.		Cost.
Jan. 16, 1894	D. W. Page	Denver, Colo		1	21¾		78
17,		New York		1	27⅞, 4 R. Dp		1 27
Feb. 7,		Baltimore		9	22"	.78	7 02
May 24,		New York		6	21 x 18	.92	5 52
Aug. 16,	C. M. Burton	Detroit	C. 925	1	19⅛		70
Oct. 16,				1	18⅛		70
Nov. 8,	City messenger	Providence, R. I.	462	119	20"	.70	83 30
8,	" "	"		54	19⅛	.70	37 80
8,	" "	"		414	19	.70	289 80
8,	" "	"		72	18⅞	.70	50 40
22,	State Loan & Trust Co	Los Angeles, Cali.	S. F. 438	10	20"	.70	7 00
Dec. 6,	Fall River Co	Hot Springs, S. D.		12	19⅝	.70	8 40
31,	I. B. Cameron, treas	New Lisbon, Ohio	3071	9	21		6 66
Jan. 14, 1895				1			70
13,	Berks county	Reading, Pa	Ph. 677	24	19⅞	.70	16 80
Ap'l 23,			" 780	28	21"	.74	20 72
May 18,	Monmouth county	Freehold, N. J	N. Y. 1180	28	18¾	.70	19 60
18,	" "	"	"	21	19½	.70	14 70
18,	" "	"	"	35	19⅝	.70	24 50
July 21,			Pitts. 240	12	20"	.70	8 40
Nov. 19,	County clerk	New Brunswick, N. J.	N. Y. 1431	13	20⅞, reg	.74	9 62
27,			" 1493	2	15"		1 94
Dec. 31,		Boston	B. 886	9	20", 4 R. Dp	.83	7 47
Jan. 14, 1896			C. 2007	48	18", reg	.70	33 60
				1,178*	O K.*		

[* In pencil in copy.]

(Here follows drawing marked p. 464.)

FOLD OUT IS TOO LARGE TO BE FILMED

465 *Report of Auditor.*

Filed January 15, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY *vs.* THE OFFICE SPECIALTY MANUFACTURING COMPANY.	No. 13793. Equity. Docket 33.

By a decree passed on the 3d of June, 1893, this cause was referred to me to ascertain, take, state, and report an account of the gains, profits, and advantages which said defendants have received or which have arisen or accrued to them or either of them from the manufacture, use, or sale of shelves or cases containing shelves embodying the improvements described and claimed in claims 1 and 2 of letters patent No. 450,124, and also to assess the damages suffered by the plaintiff herein by reason of said infringement.

After due notice, I entered upon the execution of this order of reference on the 5th of July, 1893, at which time it was agreed that the defendant company should present an account as a basis for further proceedings; and at a further hearing on the 17th of July, counsel being present and being heard, the auditor directed the defendants to file, on or before September 15, 1893, and to present to the counsel for complainant for inspection such an account as contemplated by the order of reference.

On the date so fixed counsel for the defendant filed a statement in the nature of a summarized account and which is returned as part of this report. To this account the plaintiff, by counsel,
466 filed exceptions, upon hearing of which, after due notice, the auditor directed the defendants to produce at a fixed date all books, accounts, and records relating to the manufacture, use, or sale of shelves or cases containing shelves embodying the improvements described and claimed in claims 1 and 2 of the said letters patent, and that they should appear in person or by the proper officers of the defendant company or the person in charge of said manufacture, use, or sale or of the said books, accounts, and records for examination in this proceeding.

Subsequently, at a hearing pursuant to adjournment and notice, counsel for the defendants asked leave to withdraw the statement filed by them on the 15th of September, purporting to be a summary account, to which request the counsel for the plaintiff objected, and the auditor, after hearing counsel, denied the request.

At that hearing the taking of testimony was begun and continued at various dates as counsel respectively moved, proceeding in the reference until November 24, 1896, on which date counsel submitted oral arguments and filed briefs.

The record of these proceedings under the order of reference is

returned as a part of this report, containing both the testimony offered and received and a history of the several proceedings in the way of motions, filing of accounts, statements, exhibits, etc.

The matters of reference being submitted, I prepared, in accordance with the practice, a draft report, a copy of which was submitted to counsel for each of the parties, and on December 21, 1896, pursuant to notice, the said draft report and exceptions to the same filed by the respective counsel were read and discussed. These exceptions are filed and marked as such and returned with this report and record.

467 Some corrections have been made as to numbers and description of shelves and in other respects the conclusions and findings of this report are substantially the same as in the draft report.

Subsequently to the filing of the first statement by the defendant, on September 15, 1893, the said defendant produced and filed a statement which is marked "Memorandum No. 1," purporting to be an account of the number of roller shelves of the form described in Exhibit Office Specialty Manufacturing Co. Catalogue, Figure 17, or in Exhibit Hansmann's Sketch, sold by the said company to September 15, 1893, and later in the progress of the reference other statements were filed by the defendant, some in explanation and detail of the first, and ultimately a general statement setting forth all sales of No. 4 roller shelves by the defendant to September 1, 1896, with their respective sizes, names of parties to whom sold, and cost to the defendant of manufacture.

From the proofs so furnished and testimony taken here it appears that to the 15th of September, 1893, the defendant company had sold 25 roller shelves of the form and description illustrated in Exhibit "Office Specialty Manufacturing Company Catalogue, Figure 17," and 28,171 roller shelves like the Exhibit "Hansmann's Sketch." It also appears that at that date the defendant had also sold roller shelves asserted to be different in form and construction, and designated as "new No. 4 roller shelf," to the number of 4,161; that after the 15th of September, 1893, the defendant had sold no shelves of the form and description illustrated in said exhibits above named, but had sold an additional number of the shelf designated as new No. 4, making the entire sales of the latter form of shelf to September 1, 1896, 18,427.

468 These shelves were mostly sold in cases or in combination with cases, though some in small quantities were sold separately, the proportion of the latter to the former being about five per cent.

The last statement of sales filed by the defendant is intended to show their entire sales of all these roller shelves to September 1, 1896, and the cost of manufacture. They show the number of the shelves of the form and description illustrated in the Exhibit Office Specialty Manufacturing Company Catalogue, Figure 17, and Exhibit Hansmann's Sketch sold in cases to be 27,168, and 1,028 sold without cases. The first statement furnished by the defendant, which will be found on page 162 of the Auditor's Record, shows that

25 of these shelves were such as described in the exhibit first above named and the remainder such as described in Exhibit Hansmann's Sketch. The statements furnished by the defendant, however, do not distinguish between the two forms, nor is such distinction material for the purpose of this accounting, inasmuch as the decree expressly adjudges both to infringe the plaintiff's patent, and it is not contended by the defendant that there was any difference either in cost of manufacture or in selling prices. The complete statements referred to also show that the whole number of shelves designated as new No. 4 roller shelf sold by the defendant to September 1, 1896, was 17,249 in cases and 1,178 separately from cases, making in all 18,427 of the said new No. 4 shelf. No distinction is made between these new No. 4 shelves and the other description of No. 4 shelves as to cost of manufacture or selling prices, nor is it contended that any difference existed in these respects between
469 the two. I refer to these features of the evidence in connection with the method adopted in ascertaining the proceeds of sales of either of these forms of shelf.

The statement filed by the defendant September 15, 1893, undertakes to give the number of shelves sold prior to that date, the minimum and maximum prices at which they were sold, and the estimated average of such prices. This statement, as explained by the defendant's general manager in his testimony, is altogether a mere estimate and not presented as at all accurate.

The accounts or statements contained in Exhibit Memorandum No. 1, filed by the defendant, purport to be a report in detail of shelves sold prior to the date above named, giving names of parties to whom and the prices at which they were sold. The general manager of the defendant testifies on pages 14 and 15, Aud. Rec., that although these accounts are made up from the defendant's books, they are not tendered as certain and reliable, and that in respect to the selling prices they are, to use the language of the witness, largely guesses. It appears from the last account of sales presented that the said memorandum exhibit is also inaccurate as to the number of shelves sold, and an analysis of the statements contained in the said exhibit shows that they are quite unreliable as to the prices at which the shelves were sold.

Taking the first two pages of this exhibit, I find reported as sold to the firm of George H. Richter & Co. 1,205 shelves at prices aggregating $1,512.05. Mr. Lomb, the defendant's general manager, testified, p. 15, Aud. Rec., that they were sold at cost and thirty-three and one-third per cent. added. The said sum of $1,512.05 would therefore represent 133⅓ per cent. of the cost of 1,205 shelves.
470 From this by a simple process the cost of the shelves is ascertained to be $1,134.03, or about 95 cents per shelf. The defendant did not manufacture these shelves, and in the first statement filed, p. 162, Aud. Rec., it is claimed that there should be added to the cost of construction .3837 per cent. of the selling prices as the just proportion of the general expenses of the defendant's business which the shelves should bear If to the cost of manufacture of these 1,205 shelves we add this percentage of the sum for

which they are said to have been sold to Richter & Co., such percentage being $580.17, we have as the total cost $1,714.20, or $202.15 more than the sum for which they are reported to have been sold, being a loss to the defendant of nearly 17 cents on each shelf. The report of sales to Everett, Waddy & Co. and others, to whom Mr. Lomb testifies special terms were given, exhibits similar results of loss to the defendant if the showing in this exhibit be correct.

Pursuing the analysis further, I find that in the account of the New York sales 2,602 shelves were sold for $5,918.78, or $2,275 per shelf. It the account of the San Francisco sales also I find as reported 2,355 shelves sold for $5,447.78, or $2,344 per shelf. On the other hand, the account of the Philadelphia sales show- 2,159 shelves sold for $3,135, or $1.45 per shelf. Computing the cost of manufacture at 95 cents per shelf and adding the percentage of the selling price for general expenses would make the cost of these shelves to the defendant $1,506 per shelf, or five cents and six mills more than the selling price according to the account in this exhibit.

These accounts or statements, which show such marked differences in the selling prices of the shelves, fail to disclose any
471 sufficient reason for such differences. In the above analysis I have taken the cost of manufacture to be 95 cents per shelf, while in fact, as shown by the evidence on that point furnished by the defendant in this reference, the average cost is 99 cents per shelf, showing a still greater loss in the shelves sold to Richter and others, as above noted, if correctly reported in Exhibit Memorandum No. 1.

I am unable to accept as approximately accurate or as useful in ascertaining the proceeds of the defendant's sales Exhibit Memorandum No. 1 and am compelled to resort to other evidence for that purpose.

It appears in proof that the defendant had established schedule or list prices at which these shelves were sold. A partial schedule or list appears, in connection with the testimony of Mr. Lomb, on p. 45, Aud. Rec., and another on p. 139, the latter being more complete than the former. See also Mr. Lomb's testimony on p. 29, Aud. Rec. It is true that Mr. Lomb testifies that these prices were not always adhered to, but were modified in some instances. No attempt is made, however, to specify these instances, excepting as reported in Exhibit Memorandum No. 1, which, as I have stated, is obviously unreliable, and, the regular established selling prices of the defendant having been shown, I must hold that the burden of proving any departure from such prices is upon the defendant, and this proof the defendant has failed to furnish.

Taking the complete statement of sales, I group — Schedule A herewith the several classes of shelves according to sizes and dimensions to apply the established list selling prices. Mr. Lomb, on page 29, Aud. Rec., testifies that the schedule price of regular sizes of shelves up to 20-inch was $2.20. On page 45, Aud. Rec., the list states prices of sizes from 20-inch upward, the 20-inch shelves
472 or less ranging from $2.20 to *to* $2.40 per shelf, etc. The more complete schedule of selling prices found on page 139, Aud. Rec., gives the prices beginning with shelves 20 inches wide by 14

inches or less and continues upward, giving various widths and other dimensions until it gives the prices of shelves over 40 inches wide. In this list the price of the 20-inch shelf is from $2.25 to $2.60 per shelf.

In Schedule A herewith I have classified the different sizes of shelves first in a separate group comprising shelves less than 20 inches, another lot of shelves of 20 inches, another ranging from 21 to 24 inches, another from 25 to 30 inches, and another from 31 to 34 inches and above the latter, following in this classification the general divisions of sizes contained in the list of prices found on page 139. I compute the shelves less than 20 inches as being sold at $2 each, including cost of cases. This is less than the schedule or list price established by the defendant, but I have taken this as the selling price, inasmuch as the plaintiff, by counsel in argument, here uses that price in a computation of profits. The prices at which the other sizes are calculated as sold in this schedule are taken from the said list prices furnished by the defendant. This process shows the total number of shelves to be 46,623 and the total proceeds of sales as computed here to be $105,736.75. It being requisite to ascertain the average sale price of these shelves for the purposes of separating them into three schedules or classes, I divide the aggregate amount of sales by the aggregate number of shelves, the result being an average of $2.27 for each shelf sold, including the cases. This average is further corroborated by the average prices of the New York sales and San Francisco sales reported
473 in Exhibit Memorandum No. 1, and it may be worthy of note that the small aggregate profit shown in the following schedules on the sale of nearly 50,000 shelves is in itself an item of corroboration.

Having by this process ascertained a selling price or the proceeds of sale received by the defendant, it becomes necessary on the other hand to ascertain the cost of these shelves to the defendant. The cost of manufacture is accurately furnished, the shelves not being manufactured by the defendant, but made for them by the firm of Yawman & Erbe, whose bills rendered to the defendant showing the cost of such manufacture are produced and filed. In Schedule A the cost ascertained from the defendant's statements is placed opposite each of the several sizes of shelves and the amount carried out in the inner column, the proceeds of sales occupying the outer column. The aggregate cost of the entire number of shelves is shown to be $46,138.88, which divided by the total number of shelves shows the average cost to be 99 cents per shelf in cases.

The sustained patent being limited to the shelf, it becomes necessary to ascertain what was received by the defendant company from the sale of the shelves separately from the combination of shelf and case, the said defendant having failed to keep separate accounts either before or after the decree. The proof furnished by the defendant company, however, affords reasonably accurate methods of ascertaining the *rp*oceeds of sale of shelves alone or as separate from the cases. Witnesses produced by the defendant give some testimony as to the relative value and cost of shelves alone and in com-

bination. The defendant company furnishes a rule by which the selling price of the shelf may be ascertained separated from
474 the price of shelf and case. This rule is found in the schedule or list of prices on page 139, Aud. Rec., and is that a deduction of forty per cent. should be made from the list prices therein contained for the sale of shelves without cases. The counsel for the plaintiff contends that upon the whole proof the portion of the proceeds of sale of shelves in combination accruing to the shelves alone is at least one-half of the whole. I find that this contention is certainly within reasonable limits. But for this argument I should be inclined to take the rule found in the price-list on page 139 as the true method of ascertaining the cost of the shelf separately from the cost of the combination, and deduct the 40 per cent. therein named from the list selling price to ascertain the selling price of the shelf separately. Under the circumstances I divide the selling price of the shelf and case, allotting one-half to the shelf alone, and it will be observed that in ascertaining the average in Schedule A I treat all the shelves as having been sold in combination with cases for the purposes of making an average.

Having ascertained the average proceeds of sale of each shelf in combination to be $2.27, the rule of separation adopted as above stated will make the proceeds of sale of each shelf alone $1.135, and, applying the same rule of separation to the average cost of shelves in combination, the result would be that the cost of each shelf separately will average 49 cents and five mills.

Another item in the nature of cost as claimed by the defendant is the portion of the general expenses of the company's business which the shelves should bear. In the statement filed September 15, 1893, by the defendant the gross receipts from all departments of
475 the company's business during the period between the date of the patent in suit and the date of the decree and the estimated gross expenses of the said business during the same period are given. The proportion of the gross expenses to gross receipts so stated is thirty-eight and thirty-seven hundredths per cent. Taking that for the purposes of this accounting, I add to the cost of the manufacture of the shelf that percentage of its sale price as its proportion of the general expenses of the defendant's business.

Applying the aforesaid conclusions and rules, I have stated in Schedule B an account of profits realized by the defendant on the sale of roller shelves of the form and description illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, Figure 17.

In Schedule C I have stated a similar account as to roller shelves sold by the defendant to the form and description illustrated in Exhibit Hansmann's Sketch.

In Schedule D I have stated an account of the profits realized by the defendant from the sale of roller shelves designated as new No. 4 roller shelf.

Much stress is laid by counsel for the defendants upon the rule announced by courts that the burden of proof in such a case as the present is on the plaintiff to show the gain or profit realized by the

defendant from the sale of the article, and several cases are cited in which this rule is emphasized. These cases are referred to in the brief for the defendant company, and the rule generally laid down is substantially that in the ascertainment of both damages and profits the burden of proof is on the plaintiff; that if the invention is an article of manufacture the plaintiff must prove the cost
476 of the article to the defendant and the price received by the defendant from the sale of the article, the difference between these amounts being the apparent profit; that against this apparent profit the defendant, if engaged in a general business of which the patented invention constitutes only one department of its sales, is entitled to be credited with a proportionate allowance for general expenses, and that where the invention constitutes but one part of the article made and sold, it is the duty of the plaintiff to apportion the profit derived from the sale of the entire article between the patented and the other features.

I recognize the existence of the rule and appreciate its force and application here, but the question, it seems to me, is not whether the evidence at hand is the best that might have been supplied had the defendants kept separate accounts as between shelves alone and shelves in combination with the cases, but does the evidence produced by the plaintiff tend to show the profits actually made by the defendant?

In a late case cited in the defendant's brief, being The Keystone Manufacturing Company *v.* Adams, 151 U. S., 139, and upon which considerable stress is laid by counsel for the defendant here, the Supreme Court reversed the decree of the court below awarding the plaintiff a large sum. It appeared that the plaintiff offered no evidence tending to show the actual sales made by the defendant, the cost of the article to the defendant, and the prices realized from the said sales, but relied upon evidence produced by him tending to show what certain other parties were alleged to have made from the sale of similar devices in similar machines. That, however, is not such evidence as the plaintiff relies upon in the present case,
477 nor such as I should take as my basis of computing profits. There is evidence here tending to show what the defendant did make by the sale of the article comprising the patent claims sustained by the decree, and if not exactly accurate or precise it is the fault of the defendant. It is at least reasonably certain; not hypothetical.

It will be observed that all of the evidence relied on by the plaintiff for the purpose of showing or as tending to show the gains and profits realized by the defendant company is produced from that company and its records. Its books have been produced and examined. Statements made by the company or under its direction or from its books and records have been presented and filed purporting to show the numbers of these roller shelves sold during given period and the prices at which they were sold in combination with cases. The company's schedule prices of these shelves and its rule for separating the sale price of the shelves alone from shelves in combination are in proof. The actual cost to the defendant com-

pany is shown by the bills of the manufacturer produced by the company. All of this evidence is supplemented by the testimony of officers and employees of the defendant company not only as to the sales and prices, but as well their estimate of the relative cost and sale price of the shelves alone and the shelves in combination.

The defendant cannot consistently say that this evidence is hypothetical. As far as it goes it represents the actual dealings of the defendant company in this patented article.

478 The only matter left to be ascertained or estimated is the portion of the proceeds of the sales belonging to shelves separately and the separate cost of their manufacture and putting them on the market. This is shown in a reasonably accurate way by evidence drawn from the defendant company both in the testimony of their officers and in the proof of their rule of deduction in case of sale of shelves separately from the schedule prices of the shelves in cases.

As it is stoutly contended on the part of the defendant that it is incumbent upon the complainant to show by distinct and clear proof the exact profit realized by the defendant, and that it is equally incumbent upon him in the ascertainment of that proof to show the exact proceeds of the sales belonging to these shelves and the exact cost of their manufacture, I refer to the rule laid down in the case of Heering *v.* Gage, 15 Blatch., 124, in which case the court lays down the rule as follows:

"Where it is impracticable to ascertain the gains by direct evidence by reason of the failure of the defendant to keep accounts, the plaintiff may give the best evidence attainable from the nature of the case. It is then the province of the master to sift out what is valuable and reject what is not—to make an analysis of the evidence—to ascertain the result."

I have already referred to the fact appearing in proof that separate accounts were not kept by the defendant of the proceeds of sale and of the cost of the shelves alone.

It appeared in proof here that about June, 1893, the defendant company began to vend a roller shelf differing in some particulars from the article illustrated in Exhibit Office Specialty Manu-

479 facturing Company Catalogue, Figure 17, and Exhibit Hansmann's Sketch, and continued the sales of such shelf to the date of this accounting.

The plaintiff contends that these shelves are an infringement of the sustained claims of the patent in suit, and that the defendant company should be required to account for the gains and profits realized from their sale. This contention is denied by the defendant company, and the question confronting the auditor on this point is to some extent one of infringement.

In the general history of patent litigation as gathered from the reports many instances are to be found in which defendants have resorted to the use or sale of a structure or device differing in some particular from that described in the sustained patent or in the decree, and the courts have generally held it to be the province and

to some extent the duty of the auditor or master to inquire whether the new structure or device in fact infringes the sustained patent.

The primary duty of the auditor or master, however, is to examine and decide whether the difference is substantial or whether the new device is within the decree of the court.

Ball Glove Fastening Co. *v.* Ball and Socket Fastening Co., 58 Fed. Rep., 245.

"A decree finding infringement binds the master as to everything substantially like the infringing device, though he may inquire whether specific articles are covered by the decree."

Wooster *v.* Thornton, 26 Fed. Rep., 274.

It is not the duty of the master to consider the general scope and extent of the patent or to go into a general study of the art. It is his duty to inquire and decide as to the extent of the infringement and as to the particular articles sold by the defendant. It is
480 sufficient that he compare the articles offered in evidence to decide whether those used or sold by the defendant infringe the plaintiffs'.

Turrill *v.* Illinois Central R. R. Co., — Biss., 345, 348.

See also—

Knox *v.* Great Western W. M. Co., 6 Saw., 436.

Applying these rules to the present case, I find that the court in its decree expressly decided that the article illustrated in Exhibit Office Specialty Company's Catalogue, Fig. 17, and in the Hansmann's Sketch infringed the sustained patent. Is the modified, or, as it is designated here, the new No. 4 roller shelf, any less an infringement, or, to put the question in another form, is the latter substantially different from the former?

The defendant has produced and deposited in the case one of the modified or new shelves, and a comparison of the two forms will develop the points of difference.

I use the Exhibit Hansmann's Sketch as being more convenient for the purposes of this comparison than the figure 17 in the catalogue.

In the shelf illustrated in Hansmann's sketch the side bars, which may be marked for convenience E, are carried forward past the front bar *b* and are journaled into the front rollers. These rollers, starting at their junction with the side bars, extend toward the center, meeting bars which extend inwardly a short distance and then curve respectively to the right and left or toward the center and from it, the former curves being for convenience marked *c* and the latter *a*. The curved portions marked *c* do not meet, but leave a very small space between their ends of bar *b*. These bars extending to bar *b* form a re-entrant bend or recess for use as a
481 hand hole. Both sets of these curved bars are riveted to the front bar *b*.

In the new shelf the side bars terminate with a slight projection forward of the front bar and are riveted to that bar at the

point of passage. The front rollers in this shelf are contained in brackets and riveted to the front bar, and between these brackets at their inner termination there is left a space at the front center of the front bar forming a recess, also serving as a hand hole.

In this connection it will be observed that in the Hansmann's sketch shelf the curved portions of bar marked *a* are in form of the end of a bracket, the inner end of the brackets sustaining the front rollers in the new shelf being at their inner ends similar in their curve, with the exception that they are not so deeply set.

In Hansmann's sketch a bar is carried back from the center of the front bar *b*, starting between the terminations of the curved bars *c* and carried back beyond the central bars and between them to a point where it meets a bent bar, having its bend and center at the point of meeting and extending with an inward deflection on either side to the respective ends of the rear or innermost bar of the frame.

In the new shelf a bar starting at a point midway between the brackets supporting the front rollers extends inwardly to the rear bar of the frame, where it meets a bent bar, having its bend and center at the point of meeting and extending with an outward or forward deflection to the side bars.

482 These are the points of difference, and may be summarized as follows:

The space between the front rollers at the center in Hansmann's sketch is in form of a curve, while in the other it is square, both capable, however, of being described as a recess.

The front rollers in one are journaled into the main frame at their outward ends and so supported in part by the frame, while in the other they are supported by separate bars fastened to the main frame.

483 The bent bar shown in Hansmann's sketch is reversed in the new shelf, deflecting in the former inwardly or backwardly, and in the other outwardly or forward, as it extends from its center to the sides of the frame.

I am unable to find that these are substantial departures from the shelf illustrated in Hansmann's sketch and Exhibit Office Specialty Manufacturing Co. Catalogue, Fig. 17. I view them as being of the character held to be colorable only in the cases of Ball Glove Fastening Co. *v.* Ball and Socket Fastening Co., *supra*, and Turril *v.* Ill. Cent. R. R. Co., 5 Biss., 348.

Some testimony, expert and otherwise, has been submitted on the part of the plaintiff to show that the new or modified form of shelf is an infringement of the sustained claims of the patent in suit and by the defendant to show that it is not such an infringement.

This testimony might be relevant and material were I dealing with an original issue of infringement, but, as I have stated, I am limited by the decree, and the scope of my inquiry is whether the new device or structure is substantially the same as that which the court has declared to be an infringement.

In the same connection, the defendant has offered in evidence letters patent No. 557,392, dated March 3, 1896, for improvement in

roller shelves. The patent is offered in support of the defendant's contention that the shelf designated as new No. 4 roller shelf is not an infringement of the plaintiff's patent.

Conceding that this patent would be competent as *prima facie* evidence upon an original issue of infringement of the plaintiff's patent, it does not appear to be relevant to the issue pre-
484 sented for the consideration of the auditor, which is whether the new or modified shelf sold by the defendant, as shown by the exhibit filed here, is substantially different from the article expressly declared by the court to be an infringement.

It may be noted that the new roller shelf sold by the defendant, as represented by the sample filed here as an exhibit, is not exactly in form and description the same as that represented in the new patent. It is possible that it may be protected by that patent, but at best the patent would be only *prima facie* evidence on the question of infringement and would not overcome the proof on which the court based its decree in this cause; much less can it prevail here against the judgment of the court that the article illustrated in catalogue, figure 17, and in Hansmann's sketch is an infringement of the sustained claims of the plaintiff's patent.

I find from the proof that the defendant company has sold, between the date of the sustained patent and the 1st of September, 1896—

25 shelves of the form and description illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, Figure 17, and—

28,171 shelves of the form and description illustrated in Exhibit Hansmann's Sketch.

I find that these shelves were sold by the defendant at an average price of $2.27 per shelf in combination with cases.

I find that of the said average price of $2.27 one-half is attributable to the shelf alone.

I find that the average cost to the defendant of manufacture of these shelves in combination with cases is 99 cents per shelf.
485 I find that of the said average cost one-half is attributable to the shelf alone.

I find that the proportion of the general expenses of the defendant's business to be borne by the said shelves is .3837 per cent. of the gross proceeds of sale.

In accordance with these findings I have in Schedules B and C herewith stated an account of the profits realized by the defendant from the sale of these said shelves, and these two schedules are made a part of these findings.

I find that the roller shelf sold by the defendant and designated as new No. 4 roller shelf is substantially the same in form and description as the shelf illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, Figure 17, and in Exhibit Hansmann's Sketch.

I find that the number of said shelves sold by the defendant between the date of the sustained patent and the 1st of September, 1896, is 18,427.

I find that the average gross proceeds of the said sales attributable to the shelves separately from cases is $1.135 per shelf.

I find that the average cost of manufacture of the said shelves separate from cases is .495 per shelf.

I find that the proportion of the general expenses of defendant's business to be borne by the said shelves is .3837 per cent. of the gross proceeds of sale, being .435 per shelf.

I find that the net profits realized by the defendant from the sale of the 25 shelves first above described to September 1, 1896, to be $5.125, as shown in Schedule B.

I find that the net profits realized by the defendant from the sale of the shelves described in Exhibit Hansmann's Sketch
486 to be $5,775.05, as shown in Schedule C.

I find the net profits realized by the defendant from the sale of the shelves designated as new No. 4 roller shelf to September 1, 1896, to be $4,777.53, as shown in Schedule D, which schedule is also made a part of these findings.

On the question of damages suffered by the plaintiff the evidence is incomplete. The only particular in which it appears that the plaintiff could have suffered in this respect would be by a diversion of business from the plaintiff by the defendant, and on this point the evidence is insufficient for the ascertaiment of any damage.

JAS. G. PAYNE, *Auditor.*

487 SCHEDULE A.

Account of Prices Received by the Defendant from the Sale of Roller Shelves Described in the Following Schedules in Combination with Cases and the Cost of Manufacture.

32	11-in.	shelves,	cost	.90	$28 80	
26	12 "	"	"	.90	23 40	
38	13 "	"	"	1.06	40 28	
341	14 "	"	"	1.08	368 28	
424	15 "	"	"	1.03	436 72	
428	16 "	"	"	.88	376 64	
4,235	17 "	"	"	.97	4,107 95	
2,626	18 "	"	"	.91	2,389 66	
9,935	19 "	"	"	.91	9,040 85	
18,085	shelves sold at $2.00					$36,170 00
16,920	20-in.	shelves,	cost	.92	$15,566 40	
		sold at $2.25				38,070 00
6,152	21-in.	shelves,	cost	1.03	6,336 56	
2,303	22 "	"	"	1.11	2,556 33	
402	23 "	"	"	1.12	450 24	
1,054	24 "	"	"	1.35	1,422 90	
9,911	shelves sold at $2.50					24,777 50

466	25-in. shelves, cost 1.47.....	685 02	
286	26 " " " 1.58.....	451 88	
63	27 " " " 1.46.....	91 98	
217	28 " " " 1.64.....	355 88	
1,032		$44,729 77	$99,017 50

488 *Schedule A*—Continued.

1,032		$44,729 77	$99,017 50
114	29-in. shelves, cost 1.76.....	200 64	
243	30 " " " 1.71.....	415 53	
1,389	shelves sold at $3.75.....		5,208 75
92	31-in. shelves, cost 1.60.....	147 20	
9	32 " " " 1.70.....	15 30	
12	33 " " " 1.87.....	22 44	
59	34 " " " 2.04.....	120 36	
146	above 34-in. " 3.34.....	487 64	
318	shelves sold at $4.75.....		1,510 50
	Total cost.....	$46,138 88	
	Total proceeds of sales.....		$105,736 75

Total number of shelves, 46,623.
Average cost, $46,138.88, divided by 46,623 = 99 cents.
Average sale, $105,736.75, divided by same = $2.27.

In ascertaining these averages all the shelves are treated as sold in cases, and the prices include cost of shelves and cases.

JAS. G. PAYNE, *Auditor.*

489 SCHEDULE B.

Account of Profits Realized by Defendant from the Sale of Roller Shelves of the Form and Description Illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, Figure 17.

Number of said shelves sold by the defendant.....	25	
Average price per shelf.....		$1.135
Average cost of manufacture per shelf.....	.495	
For general expenses of defendant's business, .3837 per cent. of gross proceeds of sale, per shelf.....	.435	
		.930
Average net profit per shelf.....		.205
Net profit on sale of 25 shelves.....		$5.125

JAS. G. PAYNE, *Auditor.*

490 SCHEDULE C.

Account of Profits Realized by the Defendant from the Sale of Roller Shelves of the Form and Description Illustrated in Exhibit "Hansmann's Sketch."

Number of said shelves sold by defendant....	28,171	
Average net profit per shelf.....	.205	
Profit on 28,171 shelves, net.....		$5,775 05

JAS. G. PAYNE, *Auditor.*

491 SCHEDULE D.

Account of Profits Realized by the Defendant from the Sale of Roller Shelves Designated as "New No. 4 Roller Shelf."

Number of said shelves sold by defendant.....	18,427	
Average net profit per shelf.....	.205	
Profit on 18,427 shelves.....		$4,777 53

JAS. G. PAYNE, *Auditor.*

492 *Exceptions to Auditor's Report.*

Filed February 11, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY *vs.* OFFICE SPECIALTY MANUFACTURING COMPANY. } No. 13793. Equity. Docket No. 33.

Exceptions to auditor's report.

Exceptions taken by the defendant to the report made herein by James G. Payne, Esq., auditor of this court, to whom this cause was referred by an order of this court made and entered on the 3rd day of June, 1893.

First exception. For that the said auditor in his said report found that the shelves of the form and description illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and of the form and description illustrated in "Exhibit Hansmann Sketch" were sold by the defendant at an average price of $2.27 per shelf in combination with cases, whereas he should have found that he was unable to ascertain what was the average selling price of said shelves in combination with cases, and that there was no competent evidence from which to determine such average selling price.

Second exception. For that the said auditor in his said report found that the average cost to the defendant of the manufacture of shelves of the form and description illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and of the form and
493 description illustrated in "Exhibit Hansmann Sketch" in combination with cases was 99 cents per shelf, whereas he

should have found that he was unable to find from the evidence what such cost of manufacture was.

Third exception. For that the said auditor in his said report found that the estimated average cost price to defendant of the shelves alone was 48½ cents per shelf (the same being one-half of the estimated average cost of shelf and case together), whereas, in view of the certain and explicit evidence afforded by "Exhibit Shelves Without Cases" and defendant's statement of Nov. 20, 1896, page 156, Auditor's Record, showing that the lowest actual cost price to the defendant of any shelf without a case was 70 cents per shelf and the average cost price of 2,206 shelves without cases was a fraction over 87 cents per shelf, he should have found that the average cost price to defendant of a shelf alone was not less than 87 cents and a fraction.

Fourth exception. For that the said auditor in his said report found that the new No. 4 roller shelf is substantially the same in form and description as the shelf illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and in "Exhibit Hansmann Sketch" and an infringement of claims 1 and 2 of the Hoffman patent in suit, whereas he should have found that said new No. 4 roller shelf was substantially different from said above-mentioned exhibit shelves and not an infringement of said claims 1 and 2 of the Hofman patent in suit.

Fifth exception. For that the said auditor in his said report found that the average gross proceeds of the sales attributable to the shelves separately from cases is $1.135 per shelf, whereas he
494 should have found that he was unable to ascertain from the evidence the average gross proceeds.

Sixth exception. For that the said auditor in his said report found that the average cost of manufacture of said shelves separate from cases is .495 per shelf, whereas he should have found from the evidence afforded by "Exhibit Shelves Without Cases" and defendant's statement of November 20, 1896, page 156, Auditor's Record, that the average cost of manufacture of said shelves separate from cases was not less than 87 cents and a fraction per shelf.

Seventh exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the 25 shelves like "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," to September 1, 1896, to be $5.125, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves.

Eighth exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the shelves described in "Exhibit Hansman Sketch" to be $5,775.05, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves.

Ninth exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the shelves designated as new No. 4 roller shelf to September 1, 1896, to be $4,777.53, as shown in Schedule D, whereas he should have found

that defendant had realized no profits from the sale of said shelves.

495 *Tenth exception.* For that the said auditor in his said report refused to consider the testimony of Alexander S. Steuart, an expert witness called by defendants, on the question of the infringement of the new No. 4 shelf, whereas he should have considered and given due weight to said testimony on said question.

Eleventh exception. For that the said auditor in his said report refused to consider the testimony of the said Alexander S. Steuart respecting the prior state of the art in relation to claims 1 and 2 of the Hoffman patent in suit and the bearing of said claims on the alleged infringing new No. 4 shelves, whereas said auditor should have considered and duly weighed said testimony on said question.

Twelfth exception. For that the said auditor in his said report has awarded plaintiff profits alleged to have been realized by the defendant, notwithstanding it appears from the bill of complaint and evidence offered by the plaintiff that the plaintiff manufactures under the Hofman patent in suit, and neither the bill nor the evidence discloses that the plaintiff has marked its article made under said patent with the word "patented," together with the day and year the patent was granted, nor that the defendant was duly notified of its infringement and continued after such notice to make, use, or vend the article so patented, whereas he should have refused to award any profits or damages because of the inhibition of sec. 4900, Revised Statutes.

CHURCH & CHURCH,
Solicitors — of Counsel for Defendant.

Feb'y 11, 1–97.

496 Endorsed.

The counsel for the complainant having informed the justice here presiding that this cause has already been before Mr. Justice Cox, who is familiar with the entire litigation, and that it would therefore effect an economy of time if these exceptions were heard before that justice, the cause is referred to him for hearing.

A. B. HAGNER.

March 2, '97.

Order Sustaining and Overruling Exceptions.

Filed April 5, 1897.

Supreme Court, District of Columbia.

FENTON METALLIC MAN. CO.
v.
OFFICE SPECIALTY MAN. CO. } In Equity. No. 13793.

On consideration of the exceptions filed to the auditor's report, it is by the court this 5th day of April, A. D. 1897, ordered that exceptions Nos. 4 and 9 are sustained, and that exceptions Nos. 1, 2, 3,

5, 6, 7, and 8 *he*, and they are hereby, overruled, and that exceptions as to matters set forth in said exceptions Nos. 4 and 9 the said report is hereby affirmed.

W. S. COX, *J.*

497 *Opinion as to Exceptions to Auditor's Report.*

Filed April 5, 1897.

FENTON METALLIC MAN. CO.
v.
OFFICE SPECIALTY MAN. CO.

In discussing the exceptions to the auditor's report the defendant claimed the right to discuss anew the rights of the complainant already adjudged by Ch. J. Bingham on the ground that his decree is only interlocutory. That decree was rendered after a very careful examination of the case, and the ch. justice was only prevented by sickness from preparing a written opinion. I am not disposed to review the questions decided by him, especially as I see no reason to differ with him after such examination as I have been able to give to the case.

I think that the auditor has made one important mistake. He has assumed that he was directed to report upon any and all infringements practised by the defendant, and with that view has received evidence as to a device which had not been before the court and as to which there has been no decision, the device being known as the new No. 4 shelf.

While the order of reference does, in general terms, direct injuries as to any infringements of complainant's patent, this must be construed to have reference to those only which had been determined by this court to be such, viz., those shown in Exhibit, &c., &-., No. 17, and Exhibit Hansman's Sketch.

For this reason exceptions four and five should be sustained.

Exceptions ten and eleven would have been unnecessary if the auditor had not entered upon that inquiry & need not be
498 acted upon.

I do not see that the auditor has erred in his calculations on the cost and profit. It seems to me that he has come as near to an accurate result as the circumstances of the case admit, and it is the fault of the defendant that it is not more certain.

I think, therefore, that the 1st, 2nd, 3rd, 5th, 6th, 7th, & 8th exceptions should be overruled.

The 12th exception is overruled as setting up a defence to the bill which was not made in pleadings.

W. S. COX, *J.*

Decree.

Filed April 19, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MFG. CO. *vs.* OFFICE SPECIALTY MFG. CO. } In Equity. No. 13793.

Final decree.

This cause having heretofore come on to be heard upon the report of James G. Payne, Esq., the auditor of this court, to whom it was referred to ascertain, state, and report an account of the gains, profits, and advantages which said defendant had received or which had accrued to it from the manufacture, use, or sale of shelves or cases containing shelves embodying the im-
499 provements described and claimed in claims 1 and 2 of letters patent No. 450,124, in accordance with the decree herein dated June 3rd, 1893, which report is dated the 15th day of Jan., 1897, and also upon the exceptions taken to the said report on the part of said defendant, and an order having been made on the 5th day of April, 1897, sustaining defendant's exceptions Nos. 4 and 9, overruling defendant's exceptions Nos. 1, 2, 3, 5, 6, 7, and 8, and affirming the said report excepting as to matters set forth in said exceptions Nos. 4 and 9, and the case now coming on for final decree this 19th day of April, 1897—

It is ordered, adjudged, and decreed that the said decree of June 3rd, 1893, and the said order of April 5th, 1897, be, and the same are hereby, confirmed and made final; that the said defendant pay to the said plaintiff the sum of five thousand seven hundred and eighty dollars and seventeen cents ($5,780.17), with interest from the 15th day of Jan., 1897, the date when said report was submitted to the court, to the date hereof.

And it is further ordered, adjudged, and decreed that the said defendant also pay to the plaintiff its costs in the suit, to be taxed (including $250 of the auditor's fees), and that said plaintiff have judgment and execution for such costs and for the sum above decreed, with interest, to be paid by said defendant to said plaintiff as aforesaid.

W. S. COX, *J.*

500 *Petition for Appeal, Assignment of Errors, etc.*

Filed May 5, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY *vs.* OFFICE SPECIALTY MANUFACTURING COMPANY. } In Equity. No. 13793.

Petition for appeal.

The above-named defendant, conceiving itself aggrieved by the final decree made and entered on the 19th day of April, 1897, in the above-entitled cause, does hereby appeal from said decree to the Court of Appeals of the District of Columbia for the reasons specified in its assignment of errors filed herewith, and it prays that its appeal may be allowed, and that a proper citation may be issued, directed to the above-named plaintiff and commanding it to appear before the Court of Appeals of the District of Columbia to do and receive what may pertain to justice to be due in the premises, and that a transcript of the record, proceedings, and evidence in said cause, duly authenticated, may be transmitted to the said Court of Appeals of the District of Columbia.

CHURCH & CHURCH,
Sol'rs for Defendant, The Office Specialty Mfg. Co.

The foregoing appeal is hereby allowed. Dated Washington, D. C., May 5th, 1897.

W. S. COX, *J.*

501 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY *vs.* OFFICE SPECIALTY MANUFACTURING COMPANY. } In Equity. No. 13793.

Assignment of Errors.

And now comes the above-named defendant and says that in the record and proceedings in this cause there is manifest error in this, to wit:

1. That the court erred in holding letters patent No. 450,124 to be good and valid in law.

2. That the court erred in holding that Horace J. Hoffman was the original and first inventor of the invention described and claimed in said letters patent No. 450,124.

3. That the court erred in holding that defendant had infringed claims 1 and 2 of said letters patent No. 450,124 by using and vending roller shelves such as illustrated in "Figure 17 of Complainant's Exhibit Office Specialty Manufacturing Company's Catalogue."

4. That the court erred in holding that defendant had infringed claims 1 and 2 of said letters patent No. 450,124 by using and vending roller shelves such as illustrated in "Complainant's Exhibit Hansmann's Sketch."

5. That the court erred in overruling defendant's first exception to the auditor's report, reading as follows:

"First exception. For that the said auditor in his said report found that the shelves of the form and description illustrated in 'Exhibit O. S. Mfg. Co.'s Catalogue, Fig. 17,' and of the form and description illustrated in 'Exhibit Hansmann's Sketch' were sold by the defendant at an average price of $2.27 per shelf in combination with cases, whereas he should have found that he was
502 unable to ascertain what was the average selling price of said shelves in combination with cases, and that there was no competent evidence from which to determine such average selling price."

6. That the court erred in overruling defendant's second exception to the auditor's report, reading as follows:

"Second exception. For that the said auditor in his said report found that the average cost to the defendant of the manufacture of shelves of the form and description illustrated in 'Exhibit O. S. Mfg. Co.'s Catalogue, Fig. 17,' and of the form and description illustrated in 'Exhibit Hansmann Sketch' in combination with cases was 99 cents per shelf, whereas he should have found that he was unable to find from the evidence what such cost of manufacture was."

7. That the court erred in overruling defendant's third exception to the auditor's report, reading as follows:

"Third exception. For that the said auditor in his said report found that the estimated average cost price to defendant of the shelves alone was 49½ cents per shelf (the same being one-half of the estimated average cost of shelf and case together), whereas, in view of the certain and explicit evidence afforded by 'Exhibit Shelves Without Cases,' and defendant's statement of Nov. 20, 1896, page 156, Auditor's Record, showing that the lowest actual cost price to the defendant of any shelf without a case was 70 cents per shelf, and the average cost price of 2,206 shelves, without cases, was a fraction over 87 cents per shelf, he should have found that the average cost price to defendant of a shelf alone was not less than 87 cents and a fraction."

8. That the court erred in overruling defendant's fifth exception to the auditor's report, reading as follows:

"Fifth exception. For that the said auditor in his said report found that the average gross proceeds of the sales attributable to the shelves separately from cases is $1.135 per shelf, whereas he should have found that he was unable to ascertain from the evidence the average gross proceeds."

9. That the court erred in overruling defendant's sixth exception to the auditor's report, reading as follows:

"Sixth exception. For that the said auditor in his said report found that the average cost of manufacture of said shelves separate

from cases is .495 per shelf, whereas he should have found from the evidence afforded by 'Exhibit Shelves Without Cases' and defendant's statement of November 20, 1896, page 156, Auditor's Record,
503 that the average cost of manufacture of said shelves, separate from cases, was not less than 87 cents and a fraction per shelf."

10. That the court erred in overruling defendant's seventh exception to the auditor's report, reading as follows:

"Seventh exception. For that the said auditor in his said report found the net profits re*l*aized by the defendant from the sale of the 25 shelves like 'Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17,' to September 1, 1896, to be $5,125, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves."

11. That the court erred in overruling defendant's eight- exception to the auditor's report, reading as follows:

"Eight- exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the shelves described in 'Exhibit Hansmann's Sketch' to be $5.775.05, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves."

12. That the court erred in decreeing that the defendant should pay to the plaintiff the sum of five thousand seven hundred and eighty dollars and seventeen cents ($5,780.17), with interest from the 15th day of January, 1897.

13. That the court erred in awarding an injunction against the said defendant.

14. That the court erred in not dismissing the plaintiff's bill of complaint for want of equity, with costs to the defendant.

Wherefore the said defendant prays that the said decree aforesaid may as to the particulars hereinbefore stated be reversed and the said court be directed to enter a decree dismissing the plaintiff's bill for want of equity, with costs to defendant.

Washington, D. C., May 4, 1897.

CHURCH & CHURCH,
Solicitors for Defendant.

504 In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY *vs.* CHARLES E. BIRCKHEAD and THE OFFICE SPECIALTY MANUFACTURING COMPANY.	No. 13793. In Equity

The President of the United States to Fenton Metallic Manufacturing Company, Greeting:

You are hereby cited and admonished to be and appear at a Court of Appeals of the District of Columbia, upon the docketing the cause therein under and as directed by the rules of said court, pursuant to an appeal allowed in the supreme court of the District of Co-

lumbia on the fifth day of May, 1897, wherein The Office Specialty Manufacturing Company is appellant and you are appellee, to show cause, if any there be, why the decree rendered against the said appellant should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Edward F. Bingham, chief justice of the supreme court of the District of Columbia, this 7th day of May, in the year of our Lord one thousand eight hundred and ninety-seven.

Seal Supreme Court of the District of Columbia.

JOHN R. YOUNG, *Clerk.*

Service of the above citation accepted this 7 day of May, 1897.

CHARLES E. FOSTER,
Solicitor for Appellee.

[Endorsed:] No. 13793. Equity. Fenton Metallic Man'f'g Co. *vs.* Office Specialty Man'f'g Co. Citation. Issued May 7, 1897. Ret'd May 24, 1897. Served cop- of the within citation on —— ——. —— ——, marshal. Service accepted. (See *infra.*) 32. Church & Church. —— ——, attorney for appellant.

504½ *Allowance of Appeal by Plaintiff.*

Filed May 10, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
OFFICE SPECIALTY MANUFACTURING COMPANY. } In Equity. #13793.

The plaintiff and appellant prays an appeal from so much of the decree in the above case as sustains the defendant's exceptions 4 and 9, and its appeal bond is fixed at fifty dollars.

W. S. COX, *J.*

505 *Allowance of Notice of Appeal & Waiver of Citation.*

Filed May 10, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
OFFICE SPECIALTY MANUFACTURING COMPANY. } In Equity. #13793.

Notice of appeal is hereby acknowledged in above case and service of citation is hereby waived.

CHURCH & CHURCH,
Sol'rs for Def'ts.

May 10, '97.

506 Supreme Court of the District of Columbia.

MONDAY, *June* 7, 1897.

Court meets pursuant to adjournment.

FENTON METALLIC MANUFACTURING COMPANY *vs.* OFFICE SPECIALTY MANUFACTURING COMPANY. } 13793. Equity. Docket 33.

It is by the court, this 7th day of June, 1897, ordered that the time within which to complete and file the transcript of the record of this cause for use in the Court of Appeals for the District of Columbia be, and the same hereby is, extended to the 21st day of July, 1897.

507 Filed July 2, 1897.

In the Supreme Court of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY *vs.* OFFICE SPECIALTY MANUFACTURING COMPANY. } In Equity. No. 13793.

J. R. Young, Esq., clerk supreme court, D. C.

DEAR SIR: Will you please, as soon as practicable, prepare a transcript of the record in the above-entitled case, and transmit the same to the Court of Appeals of the District of Columbia for use on the appeal and cross-appeal taken to said court.

In making up the transcript please include the papers and documents given in the following schedule, and those only:

1. Amended bill, filed April 11, 1892.
2. Answer, filed April 23, 1892.
3. Replication, filed April 26, 1892.
4. Complainant's printed record containing index and 70 printed pages of testimony, omitting the deposition of Frank S. Osborn, pp. 33 to 40, inclusive.
5. Defendant's record, consisting of 55 printed pages.
6. Page 14, containing cuts and description of Figs. 16 and 17 of the exhibit "Complainant's Exhibit Office Specialty Mfg. Co.'s Catalogue." (Omit all rest of catalogue.)
7. Defendant's Exhibit File-wrapper and Contents of Patent in Suit.

508 8. Complainant's Exhibit C, copy of decision of examiner of interferences.

9. Complainant's Exhibit D, copy of decision of examiners-in-chief.
10. Complainant's Exhibit E, copy of decision of Commissioner of Patents.
11. Copy Complainant's Exhibit Jewell & Yawman File-wrapper and Contents and Drawing of Patent 557,392, dated March 31, 1896

11*a*. Copy of drawing originally filed as a part of the Jewell & Yawman application of December 5, 1891.

12. Exhibit Copy of Petition, Oath, and Drawing of Jewell & Yawman Application, 290,122, of Nov. 6, 1888.

13. Complainant's Exhibit A, Hoffman patent No. 450,124, of April 7, 1891, in suit.

14. Stipulation as to use of affidavits on file as testimony, with right to cross-examine affiants reserved. (If this is printed as part of defendant's record it need not be entered a second time in the transcript.)

15. Exhibit Harris Patent, 107,042.
16. " Boone Patent, 182,157.
17. " Wolfe Patent, 220,265.
18. " Conant Patent, 316,241.
19. " Adams Patent, 338,459.
20. " Hoffman Patent, 437,833.
21. " Jewell & Yawman Patent, 557,392.

22. Interlocutory decree granting injunction and referring cause to auditor, filed June 3, 1893.

23. Auditor's record except whole deposition of Frank Senior, pages 70 to 76, inclusive, and defendant's motion for extension of time; affidavits in support of same and auditor's ruling thereon, pages 149 to 154, inclusive.

23*a*. Exhibit Shelves in Cases.

23*b*. Exhibits Shelves Without Cases.

23*c*. Complainant's Exhibit Hine Drawing.

24. Auditor's report, filed January 15, 1897.

25. Defendant's exceptions to auditor's report, filed Feb. 11, 1897.

26. Complainant's exceptions to auditor's report.

509 27. Judge Cox's order sustaining in part and overruling in part exceptions to auditor's report, filed April 5, 1897.

28. Judge Cox's opinion as to exceptions to auditor's report, filed April 5, 1897.

29. Final decree, filed April 19, 1897.

30. Defendant's petition for appeal and assignment of errors, allowance of appeal, etc., filed May 5, 1897.

31. Allowance of appeal by plaintiff.

32. Citation to plaintiff.

We will provide you, when you are ready for them, printed copies of the various patents included in the schedule, so that the expense of reproducing said copies may be avoided.

Respectfully,

CHARLES E. FOSTER,
Solicitor for Complainant.
CHURCH & CHURCH,
Solicitors for Defendant.

July 2d, 1897.

510 *Order Extending Time for Producing and Filing Transcript.*

Filed July 15, 1897.

In the Supreme of the District of Columbia.

FENTON METALLIC MANUFACTURING COMPANY
vs.
OFFICE SPECIALTY MANUFACTURING COMPANY. } In Equity. No. 13793.

It being represented to the court that the record in this cause is very voluminous, and that the time for producing and filing a transcript thereof for use upon appeal is inadequate, it is by the court this 15th day of July, 1897, ordered that the time for producing and filing said transcript be, and the same is hereby, extended to and including August 21st, 1897.

CHAS. C. COLE,
Asso. Justice.

It is agreed that the above order may be entered.

CHAS. E. FOSTER,
Counsel for Complainant.
CHURCH & CHURCH,
Counsel for Defendant.

511 Supreme Court of the District of Columbia.

UNITED STATES OF AMERICA, *District of Columbia,* } *ss:*

I, John R. Young, clerk of the supreme court of the District of Columbia, do hereby certify that the foregoing pages, numbered from 1 to 510, inclusive, are true copies of originals in cause No. 13793, in equity, wherein Fenton Metallic Manufacturing Company is complainant and Charles E. Birckhead *et al.* are defendants, as the same remains upon the files and records of said court.

Seal Supreme Court of the District of Columbia.

In testimony whereof I hereunto subscribe my name and affix the seal of said court, at the city of Washington, in said District, this 3d day of August, A. D. 1897.

JOHN R. YOUNG, *Clerk.*

Endorsed on cover: District of Columbia supreme court. No. 726: Fenton Metallic Manufacturing Company, appellant, *vs.* The Office Specialty Manufacturing Company. Filed August 30, 1897. No. 727: The Office Specialty Manufacturing Company, appellant, *vs.* Fenton Metallic Manufacturing Company. Filed August 31, 1897.

FENTON METALLIC MANUFACTURING COMPANY,
Appellant,
vs.
THE OFFICE SPECIALTY MANUFACTURING COMPANY. } No. 726.

and

THE OFFICE SPECIALTY MANUFACTURING COMPANY,
Appellant,
vs.
FENTON METALLIC MANUFACTURING COMPANY. } No. 727.

The argument in the above-entitled cases was commenced by Mr. Charles E. Foster, attorney for Fenton Metallic Manufacturing Company, and was continued by Mr. Melville Church, attorney for the Office Specialty Manufacturing Company, and was concluded by Mr. Charles E. Foster, attorney for Fenton Metallic Manufacturing Company.

309 FENTON METALLIC MANUFACTURING COMPANY,
Appellant,
vs.
THE OFFICE SPECIALTY MANUFACTURING COMPANY. } No. 726.

and

THE OFFICE SPECIALTY MANUFACTURING COMPANY,
Appellant,
vs.
FENTON METALLIC MANUFACTURING COMPANY. } No. 727.

Opinion.

Mr. Justice SHEPARD delivered the opinion of the court:

This suit is for the infringement of a patent, and both parties have appealed from the final decree in part. The bill was filed by the Fenton Metallic Manufacturing Company against Charles E. Birckhead and the Office Specialty Manufacturing Company. By stipulation, Birckhead, who was the local agent of his codefendant, has been dismissed from the suit.

Complainant is the assignee of Horace J. Hoffman, to whom a patent was issued February 12, 1887, for an improved storage case for books. Defendant is the assignee of Jewell and Yawman, who claimed a patent for an improvement in book shelves also.

The application of Hoffman and that of Jewell and Yawman were placed in interference in the Patent Office on a question of priority of invention; and the contest resulted in a final decision by the Commissioner of Patents in favor of Hoffman, March 7, 1891.

310 Patent was issued to Hoffman for the invention claimed on April 7, 1891. The proceedings in the Patent Office are made exhibits to the bill.

The bill charges defendant with selling and offering for sale the

improvement of the complainant to its great damage and injury. The bill prayed for an account of the damages claimed and for a decree, and for an injunction against further infringement.

The answer admits the proceedings and decision of the Patent Office, but denies that Hoffman was the first inventor. It further alleges that the patent to Hoffman should be declared void for want of patentable novelty, on the ground that it covers a combination of old devices which perform no new function, and are the product, not of invention, but of ordinary mechanical skill; and also, that the subject-matter of the invention, as claimed has been anticipated in certain patents which are enumerated.

It is further charged that if the Hoffman patent be valid, it is by its terms confined to a certain, particular form, which the defendant has not infringed.

Upon hearing, on the evidence of infringement, the court below entered a decree June 3, 1893, to the following effect:

1. That letters patent No. 450,124, issued April 17, 1891, are valid.

2. That said Hoffman was the first inventor of the invention claimed in said patent; and that defendant has infringed it by using and vending within the District of Columbia, roller shelves made as illustrated by figure 17 of its catalogue, and by "Exhibit Hansman's Sketch," and "cases containing roller shelves embodying the improvement specified in said letters patent particularly claimed in claims one and two thereof."

3. That complainant recover the gains and profits which defendant has received by reason of its infringement; and the cause is referred to the auditor to take an account of the same accruing or arising out of "the manufacture, use, and sale of shelves, or cases containing shelves, embodying the improvements described and claimed in claims 1 and 2 of said letters patent No. 450,124, and also to assess the damages suffered by the plaintiff herein by reason of said infringement."

4. That defendant be perpetually enjoined from making, using or selling any shelf infringing the plaintiff's claims 1 and 2.

An elaborate and carefully considered report was filed by the auditor on January 15, 1897, accompanied with the evidence taken and schedules of particulars showing the foundations of his conclusions. This report concludes as follows:

"I find from the proof that the defendant company has sold, between the date of the sustained patent and the 1st of September, 1896—

"25 shelves of the form and description illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, figure 17, and—

"28,171 shelves of the form and description illustrated in Exhibit Hansmann's Sketch.

"I find that these shelves were sold by the defendant at an average price of $2.27 per shelf in combination with cases.

"I find that of the said average price of $2.27 one-half is attributable to the shelf alone.

"I find that the average cost to the defendant of manufacture of these shelves in combination with cases is 99 cents per shelf.

"I find that of the said average cost one-half is attributable to the shelf alone.

"I find that the proportion of the general expenses of the defendant's business to be borne by the said shelves is .3837 per cent. of the gross proceeds of sale.

"In accordance with these findings I have in Schedules B and C herewith stated an account of the profits realized by the defendant from the sale of these said shelves, and these two schedules are made a part of these findings.

"I find that the roller shelf sold by the defendant and designated as new No. 4 roller shelf is substantially the same in form and description as the shelf illustrated in Exhibit Office Specialty Manufacturing Company Catalogue, figure 17, and in Exhibit Hausmann's Sketch.

"I find that the number of said shelves sold by the defendant between the date of the sustained patent and the 1st of September, 1896, is 18,427.

"I find that the average gross proceeds of the said sales attributable to the shelves separately from cases is $1.135 per shelf.

"I find that the average cost of manufacture of the said shelves separate from cases is .495 per shelf.

"I find that the proportion of the general expenses of defendant's business to be borne by the said shelves is .3837 per cent. of the gross proceeds of sale, being .435 per shelf.

"I find that the net profits realized by the defendant from the sale of the 25 shelves first above described to September 1, 1896, to be $5.125, as shown in Schedule B.

"I find that the net profits realized by the defendant from the sale of the shelves described in Exhibit Hausmann's Sketch to be $5,775.05, as shown in Schedule C.

"I find the net profits realized by the defendant from the sale of the shelves designated as new No. 4 roller shelf to September 1, 1896, to be $4,777.53, as shown in Schedule D, which schedule is also made a part of these findings.

"On the question of damages suffered by the plaintiff the evidence is incomplete. The only particular in which it appears that the plaintiff could have suffered in this respect would be by a diversion of business from the plaintiff by the defendant, and on this point the evidence is insufficient for the ascertainment of any damage."

Defendant excepted to the report on many grounds, all of which were overruled except as to the item of damages assessed for infringement through the sale of what was designated as "New No. 4 roller shelf." These damages were assessed at $4,777.53.

A final decree was then entered ordering the payment by the defendant of the sum of $5,780.17, with interest from January 15, 1897, on account of the infringement found in the two structures specifically set out in the decree; but denying the aforesaid item of $4,777.53 as being beyond the terms of that decree and the reference thereunder to the auditor.

Defendant appeals from the decree as entered, and the complain-

ant has taken a cross-appeal from that part of the same
311 which sustains the exception to the item aforesaid of the auditor's report.

1. The question at the threshold of the case is that of the validity of the Hoffman patent, the infringement of two of the claims of which is the subject-matter of the suit.

Beginning a number of years ago, the increased and increasing use of very heavy record books in public and private offices made it important to obtain a shelf so constructed as to permit the constant, safe and convenient handling of such books—weighing sometimes thirty pounds, and more—and at the same time to preserve their covers from the constant and severe abrasion incident to the use of the ordinary book shelf.

It appears from the evidence that this demand was first attempted to be met many years ago in the Patent Office itself by the use of rollers of wood and metal. These extended across the shelf from side to side, with journals at each end revolving in bearings provided in cleats attached to the wooden cases.

The evidence tended to show that these were not very effective, because the rollers often warped or sagged in the middle, and abrasion was not prevented; and also because handling was often attended with injuries to hands or fingers.

Quite a number of roller shelves have been invented from time to time, and many have been patented. One of the best of these was a shelf that was made for use in the office of the clerk of the court of Wayne county, at Richmond, Indiana. This was made in 1872 or 1873, and was not patented. It consisted of the ordinary wooden shelf with two wooden rollers inserted in spaces cut therein, some four to six inches from the front edge. There was a notch in the outer edge of the shelf making a hand-hole for grasping the book in the process of withdrawing the same from the shelf.

Some of the inventions most relied on as anticipations of the invention claimed by the plaintiff will now be noticed.

(1.) The Jewell and Yawman experiment of 1886 need not be described. In all the decisions made in the interference proceedings between defendant, as their assignee, and the plaintiff herein, that was found to be nothing more than an incomplete and abandoned experiment. There is no testimony to warrant us in coming to a different conclusion.

(2.) Adams patent roller and extension axle, March 23, 1886. This consists of a series of rollers inside the shelf, with two rollers attached to and extending some inches beyond the front edge of the same. These last have a space between them and rest upon a spring. Their extension in front of the shelf prevents a door closing in upon the shelves in their case.

(3.) Harris patent improvement in safe cases for books, September 6, 1870. This is called an improved case and has rollers for use in the shelf located some distance back from the front edge thereof.

(4.) Boone's patent, September 12, 1876, is for improved book shelves. The improvement consists in a single roller attached to the front edge of an ordinary shelf for books—apparently small

books inserted in an upright manner, though capable of use in either way—and a little above the same. The purpose as expressed is to prevent the abrasion of the books by the sharp front edge of the shelf.

(5.) Wolfe's patent, October 7, 1879, is for an improvement in book-cases. In his case, a series of small, narrow rollers, like wheels, are mounted in boxes resting on the shelf and extending from front to rear. The books may rest directly upon these or upon a movable shelf mounted on them.

(6.) Conant patent roller shelf book-case, April 21, 1885. This calls for a case with shelves wherein the rollers revolve on journals in bearings on strips or cleats attached on both sides of the case from front to rear. It seems to be an improvement of the method used in the Patent Office as above described. The rollers run across the shelf, and one of them is very near the front edge of the shelf so that the recess in the binding at the back of the book may rest upon it.

Other patents were referred to in the defendant's answer, but none save the foregoing are found in the evidence introduced.

In the light of the art as shown in the shelves and cases above described, it remains to examine the plaintiff's claim of invention.

Claims one and two of his patent, which are in controversy here, read as follows:

"1. In a storage case for books, &c., the combination of a supporting rack or shelf composed of metallic strips and having a re-entrant bend or recess in its front edge, and rollers journalled in said rack and projecting above and in front of the same on each side of said bend or recess, substantially as described.

"2. In a book shelf the combination of a supporting frame, a series of horizontal rollers, the front roller in two separated sections, the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections, substantially as described."

Plaintiff claims to have invented a shelf through a combination exhibiting more than ordinary mechanical skill. As stated by his expert witness:

"The second claim of the Hoffman patent is, as I understand it, for a book shelf embracing the combination of a number of features or elements recited therein, arranged and operated substantially as described in the specification, and the novelty of the claim, as far as my knowledge goes, resides in the structure termed the book shelf and embracing the features or the combination of elements set forth, and adapted for the purposes described. It does not, as I understand it, necessarily depend upon the novelty of any one or more of the features or elements recited."

The peculiar features claimed for the combination of plaintiff are the frame and the arrangement of the rollers.

The shelf is made of this frame of metal bars and strips which are rigid, and strong enough, and so arranged as to contain bearings for the rollers as distributed. These rollers are so arranged as to support the book equally throughout and prevent warping. The

front rollers extend slightly beyond the front of the frame, preventing abrasion of the book and supporting its back in co-operation with the interior rollers. The front of this frame is carried back, or recessed so as to leave a space between the two front rollers admitting the hand behind them in grasping the book. Besides forming the bottom of the shelf and supporting the book, the frame braces and supports the light metallic sides of the case in which it is bolted at the required distances. It is claimed that no such frame had ever before been constructed until the shelves of defendant were made in infringement, as alleged, of plaintiff's patent. This claim seems to be borne out by the testimony.

312

In the evidence taken, and the cross-examination of plaintiff's experts the defendant seems to have relied chiefly, if not entirely, upon the Adams patent and the wooden shelf of the clerk's office at Richmond, Indiana.

Both have been described above. In the Adams arrangement only, do we find the two forward rollers with a space or recess between them. These, however, perform no such function as the front rollers of plaintiff's shelf. They are attached to the shelf by a spring; their purpose is claimed to make easy the entrance of the book only. They do not support the book when in, and in fact do not facilitate its entrance, or prevent its contact with the front of the shelf because of the spring upon which they work. Their position prevents the closing or sliding of a door in front of the case. They have no real connection with the system of rollers inside, and the recess between answers no useful purpose. This invention was of so little value that the witness Jewell—one of the inventors of defendant's shelf—was compelled, on cross-examination, to say that it had no practical use.

The Richmond shelf has the hand-hole devised for that use only, and without connection with the rollers, or extending back to or between them. Plaintiff does not claim the hand-hole as his invention; but such a novel construction of frame and arrangement of rollers as that he obtains the obvious advantage of the rollers at the front edge of the shelf, set in the frame without springs, and the recess between them by means of which, without weakening the shelf, the hand can be passed behind the rollers to grasp the back of the book.

So far as the remaining patents above set forth are concerned, we have been left to consider them upon their specifications and drawings in comparison with the plaintiff's claims.

Whilst this duty devolves upon the court, it might have been rendered less difficult had the mechanical experts been called upon to point out their several resemblances and differences. Bischoff *v.* Wethered, 9 Wall., 812, 815; see also Heald *v.* Rice, 104 U. S., 737, 749.

In this regard it may be said that defendant's chief object in this case has been not so much to show that plaintiff's patent did not cover an invention, but that it must be so restricted in its scope that his own frame and shelf cannot be declared an infringement.

Those other patents have been described above, and after what

has been said in respect of the Adams patent and the Richmond shelf, we think it sufficient to say that they do not constitute anticipations of the plaintiff's claims.

Invention consists in the combination of old elements as well as in the discovery of an element entirely new, provided it produces a new and useful result. "New elements in such a patent are not required, and if such a defense were allowed, not one patent of the kind in a thousand of modern date could be held valid." Parks *v.* Booth, 102 U. S., 96, 104.

Looking at plaintiff's combination of frame and adjustment of rollers in his patented shelf, in the light of the art as disclosed by the constructions aforesaid, has he produced something new and useful as the result of inventive talent rather than of mere mechanical skill?

As has been well said by the Supreme Court of the United States: "It is not easy to draw the line that separates the ordinary skill of the mechanic, versed in his art, from the exercise of patentable invention, and the difficulty is specially great in the mechanic arts where the successive steps in improvements are numerous, and where the changes and modifications are introduced by practical mechanics." Krementz *v.* S. Cottle Co., 148 U. S., 559.

We have found the answer to the foregoing question one of great difficulty, and it is not without some doubt of its soundness that we have reached the conclusion that plaintiff is entitled to the award of invention.

The very fact of the existence of a reasonable doubt arising on the case made by the defendants, is sufficient to sustain the claim of the plaintiff, for it is well settled that the patent, in actions for infringement, is *prima facie* evidence of invention as well as that the patentee is the original inventor. Lehnbeuter *v.* Holthaus, 105 U. S., 94, 96; Cantrell *v.* Wallick, 117 U. S., 689, 695; Gandy *v.* Main Belting Co., 143 U. S., 587, 596.

The general superiority and utility of the plaintiff's shelf are reasonably apparent, upon examination of the drawings and models. The desired objects that have been attained by his shelf were in the minds of skilled mechanics working to the same end, and yet no one of these hit upon plaintiff's successful combination of frame and roller adjustment. Grant that by certain modifications the Adams, or the Conant, and possibly other inventions might have been made to perform the functions of the plaintiff's, still it is apparent from their drawings and specifications that these were not in the minds of their patentees. They cannot, therefore, upon that ground merely, be regarded as anticipations. Topliff *v.* Topliff, 145 U. S., 156, 161.

The evidence tends also to show that plaintiff's shelf, by reason of its superiority, has practically superseded all other roller shelves in the market; and the schedules of sales made by defendant of similar constructions show a wide-extended and increasing market. Now, whilst wide-extended sales and speedy general use are not themselves to be regarded as proving invention, still they have always been recognized as having considerable weight where the existence of patentable novelty is otherwise a matter of doubt.

Krementz *v.* S. Cottle Co., 148 U. S., 556, 560; Potts *v.* Creager, 155 U. S., 597, 660.

The difficulty, before alluded to, that often attends the demarcation of the boundary line between the exercise of ordinary mechanical skill and that of patentable invention is shown in two series of decisions by the Supreme Court of the United States, some
313 of which counsel in this case, as well as in others, find difficulty in distinguishing from each other.

Among those declaring in favor of the exercise of inventive talent may be mentioned the following: Smith *v.* Goodyear Dental Vulcanite Co., 93 U. S., 486; Loom Co. *v.* Higgins, 105 U. S., 580; The Barbed Wire patent, 143 U. S., 275; Gandy *v.* Main Belting Co., 143 U. S., 587; Topliff *v.* Topliff, 145 U. S., 156; Krementz *v.* S. Cottle Co., 148 U. S., 556; Potts *v.* Creager, 155 U. S., 597. In this last case the decisions either way are extensively reviewed. See also Dubois *v.* Kirk, 158 U. S., 58, 63.

Among the numerous decisions against the exercise of patentable invention, the following may be enumerated: Reckendorfer *v.* Faber, 92 U. S., 347; Pickering *v.* McCullough, 104 U. S., 310; Market St. R'y Co. *v.* Rowley, 155 U. S., 621; Knapp *v.* Morss, 150 U. S., 221.

From the decision in the last of those cases, Mr. Justice Brown and Mr. Justice Shiras dissented on the ground that the claim of invention was within the rule of Loom Co. *v.* Higgins, Topliff *v.* Topliff, and others, *supra*.

For the reasons before given, we have concluded that the plaintiff's claims call for the application of the doctrine of the first series of cases cited above, and must therefore be awarded to the merit of invention.

This case is clearly distinguishable from that — Durham *v.* Seymour, 6 App. D. C., 78.

In the first place, the claimant had been denied a patent by the Commissioner of Patents, as well as by the trial court, and the burden of showing patentable invention was heavily upon him. In the second, and most important, place, whilst his combination was one of merit, it was plain that there was no new arrangement by which any one of the old devices had been made to operate differently, or more effectively than when used separately. Besides, the most important of these devices had been patented to him separately, and the very important part of his combination, namely, the mode of supporting the entire system of drainage, had been unquestionably anticipated.

We have not been unmindful of the opinion expressed by Judge Lacombe in Fenton Metallic Manufacturing Co. *v.* Chase, 73 Fed. Rep., 831. On the contrary, that has been the chief occasion of the doubt heretofore expressed in respect of the soundness of our conclusion. The question of patentability came before the learned judge upon motion for preliminary injunction, unaccompanied by the evidence which this record contains, and the order was, of course, not final. Upon the presentation there made Judge Lacombe seems to have entertained the idea that the claim was for the "hand-hole" made by the re-entrant bend or recess of the front part of the frame.

This is quite different from what we have conceived to be the claim of the patentee and the merit of his combination.

Our conclusion is, we think, supported also by the following recent decisions in the circuit courts of appeals for the third and eighth circuits. Taylor *v.* Sawyer Spindle Co., 75 Fed. Rep., 301; Mast, Foos & Co. *v.* Dempster Mill Mfg. Co., 82 O. G., 338.

2. There can be no doubt that, under the well-established rule in such cases, the claims of the Hoffman patent should be restricted to the specific combination described. Knapp *v.* Morss, 150 U. S., 221, 228, and cases cited therein. Consequently, if the shelves as manufactured and sold by the defendant show a substantially different combination, or one omitting one of the elements of the plaintiff's, there can be no infringement.

Applying this test to the facts, we find that the rigid frames of each construction are substantially the same. Whilst the strips of one run at different angles from those of the others, the object and effect are identical. These have the same bearings for the rollers and a like adjustment of the latter for the support of the book.

The difference contended for by the defendant is pointed out in the front bar of the frame.

In the Hoffman shelf the space between the front rollers is made by bending back the front strip or bar. In that of defendant the same thing is accomplished by fastening the two front rollers to the strip by means of a bracket.

There is no difference of purpose, effect or operation between the two shelves as thus constructed. We cannot agree to the contention that the Hoffman claims must be limited to a shelf showing a recess between the front rollers made by bending back the front strip and in no other way. The defendant's recess made by fastening the two front rollers in a bracket riveted to the front strip is but another simple, mechanical means by which the intermediate part of the frame is "carried back to permit the admission of the hand between the roller sections," as set forth in the plaintiff's second claim. There is no new element introduced, no new or different result accomplished, no improvement made by this slight change in construction; and we must regard it as a colorable evasion merely.

"It is a well-known doctrine of patent law, that the claim of a combination is not infringed if any of the material parts of the combination are omitted. It is equally well known that if any one of the parts is only formally omitted, and is supplied by a mechanical equivalent, performing the same office and producing the same result, the patent is infringed." Water Meter Co. *v.* Desper, 101 U. S., 332, 335; Fay *v.* Cordesman, 109 U. S., 408, 421; Seymour *v.* Osborne, 11 Wall., 516, 556; McClain *v.* Ortmayer, 141 U. S., 419, 425.

3. The next point in defendant's appeal arises on the exceptions taken to the auditor's report of the damages assessed on account of the profits realized on sales of the two infringing constructions specifically named in the decree. Little, if anything, could be added to the statement of the auditor explaining the grounds of his findings. The burden of proof was upon the plaintiff, and he undertook to satisfy it by examining certain officers and agents of the

defendant corporation and requiring statements from the books, showing cost, sales, prices, and so forth. Whatever uncertainty there was in arriving at the real profits was due to the business methods of the defendant and the character of the statements made by its officers in explanation thereof. The auditor's statement of the process by which he ascertained the sum reported is
314 plain and careful, and we see no reason to disturb his conclusion. Like him, we perceive no conflict between that conclusion and the decision in Keystone Mfg. Co. *v.* Adams, 151 U. S., 139.

4. The last question for determination is that arising on the plaintiff's appeal from so much of the decree as refused him recovery of the damages found by the auditor on account of the sales by the defendant of what is called his "new No. 4 shelf."

The defendant's exceptions were founded and sustained upon the ground that the inquiry into the sales of this construction were not within the terms of the decree declaring the infringement and referring the matter of damages thereby sustained to the auditor.

In this we think the court erred. Whilst that decree expressly mentioned the two constructions designated as No. 17 of defendants' catalogue and "Exhibit Hansman's Sketch," it was not necessarily limited so as to cover them alone.

This new No. 4 shelf is substantially the same as the other two. It has the same roller-bearing frame, with the two front rollers in brackets riveted to the remainder of the frame. There is only a slight difference in form, embodying no difference whatever in purpose, effect, or operation. The journals of the front rollers, instead of working in a bracket formed by an extension of the end bar of the frame and a riveted piece near the center, as in the two described constructions, revolve in a single piece, bent forward at each end for the purpose, that is riveted to the bar coming behind it. The ends being bent forward at right angles make a square recess between the two front rollers instead of the elliptical-shaped recess of the other two and of plaintiff's shelf. We agree with the auditor that this is but a colorable change of form, and that it therefore comes within the scope of the decree and the reference.

The authorities which he cites fully sustain his views of his duty and authority in the premises. Turrill *v.* I. C. R. Co., 5 Bissell, 344; Knox *v.* G. W. Q. M. Co., 6 Sawyer, 430, 436; Ball Glove Fastening Co. *v.* Ball & Socket Co., 53 Fed. Rep., 245; Wooster *v.* Thornton, 26 Fed. Rep., 274.

The evidence supporting his finding of the amount of the damages under this head is like that in support of the first item, which we have declared to be satisfactory.

It follows from what has been said, that so much of the decree as has been appealed from by the defendant below must be affirmed, and so much of it as has been appealed from by the complainant must be reversed, with costs to the latter. The cause will therefore be remanded with directions to reform the decree below by vacating so much thereof as sustains the exceptions to the master's report, and by decreeing recovery by the complainant of the amount re-

ported by the auditor as damages on account of the infringement of his patent by defendant's new No. 4 shelf." *It is so ordered.*

315 TUESDAY, *February 8th, A. D.* 1898.

FENTON METALLIC MANUFACTURING COMPANY, Appellant, *vs.* THE OFFICE SPECIALTY MANUFACTURING COMPANY	No. 726.
and	January Term, 1898.
THE OFFICE SPECIALTY MANUFACTURING COMPANY, Appellant, *vs.* FENTON METALLIC MANUFACTURING COMPANY.	No. 727.

Appeal from the supreme court of the District of Columbia.

This cause came on to be heard on the transcript of record from the supreme court of the District of Columbia, on appeal and cross-appeal, and was argued by counsel. On consideration whereof it is now here ordered, adjudged, and decreed by this court that so much of the decree of the said supreme court in this cause as has been appealed from by the defendant, The Office Specialty Manufacturing Company, be, and the same is hereby, affirmed, and so much of said decree as has been appealed from by the complainant, The Fenton Metallic Manufacturing Company, be, and the same is hereby, reversed, the costs on both appeals to be paid by the said defendant; and that this cause be, and the same is hereby, remanded to the said supreme court with directions to reform the decree below by vacating so much thereof as sustains the exceptions to the master's report and by decreeing recovery by the complainant of the amount reported by the auditor as damages on account of the infringement of his patent by defendant's "New No. 4 shelf."

Per MR. JUSTICE SHEPARD.

February 8, 1898.

316 THURSDAY, *February 17th, A. D.* 1898.

THE OFFICE SPECIALTY MANUFACTURING COMPANY, Appellant, *vs.* FENTON METALLIC MANUFACTURING COMPANY.	No. 727.

On motion of Mr. Melville Church, of counsel for The Office Specialty Manufacturing Company in the above-entitled cause, it is ordered by the court that said The Office Specialty Manufacturing Company be allowed an appeal to the Supreme Court of the United States on giving a supersedeas bond in the sum of twenty thousand dollars.

317 Court of Appeals of the District of Columbia.

OFFICE SPECIALTY MANUFACTURING COMPANY, Appellant,
vs.
FENTON METALLIC MANUFACTURING COMPANY, Respondent.

Know all men by these presents that we, The Office Specialty Manufacturing Company, a corporation created and existing under and by virtue of the laws of the State of New York, doing business at Rochester, New York, principal, and Gustav Erbe, Carl F. Lomb, and Philip H. Yawman, all of the city of Rochester, county of Monroe, and State of New York, sureties, are held and firmly bound unto the above-named Fenton Metallic Manufacturing Company in the sum of twenty thousand dollars ($20,000), to be paid to the said Fenton Metallic Manufacturing Company; for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our successors, heirs, executors, administrators, and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated the 15th day of February, in the year of our Lord one thousand eight hundred and ninety-eight.

Whereas the above-named Office Specialty Manufacturing Company has prosecuted an appeal to the Supreme Court of the United States to reverse the decree rendered in the above-entitled suit by the judges of the Court of Appeals for the District of Columbia:

Now, therefore, the condition of this obligation is such that if the above-named Office Specialty Manufacturing Company shall prosecute said appeal to effect and answer all damages and costs if they fail to make said appeal good, then this obligation shall be void; otherwise the same shall be and remain in full force and effect.

318 Sealed and delivered and taken and acknowledged this 15th day of February, 1898.

[Seal of Office Specialty Manufacturing Company.]

OFFICE SPECIALTY MFG. CO.,
By PHILIP H. YAWMAN, *Pres't.*
Attest: CARL F. LOMB, *Treas.*
GUSTAV ERBE. [SEAL.]
CARL F. LOMB. [SEAL.]
PHILIP H. YAWMAN. [SEAL.]

This bond is approved.

FENTON METALLIC MFG. CO.,
By CHARLES E. FOSTER, *Sol'r.*

UNITED STATES OF AMERICA,
State of New York, County of Monroe, } *ss:*

Gustav Erbe, above named, named in and who executed the foregoing undertaking as surety, being duly sworn, says that he is a resident of Rochester, Monroe county, New York, and a householder and freeholder in said State aforesaid, and is worth the sum of forty thousand dollars ($40,000) over and above all the debts and liabil-

ities he owes or has incurred and exclusive of property exempt by law from levy and sale under an execution.

GUSTAV ERBE.

Sworn to before me this 15th day of February, 1898.

HORACE A. McGUIRE,
Notary Public. [SEAL.]

UNITED STATES OF AMERICA, }
State of New York, County of Monroe, } *ss:*

Carl F. Lomb, above named, named in and who executed the foregoing undertaking as surety, being duly sworn, says that he is a resident of Rochester, Monroe county, New York, and a householder and freeholder in said State aforesaid, and is worth the sum of forty thousand dollars ($40,000) over and above all the debts and
319 liabilities he owes or has incurred and exclusive of property exempt by law *and* levy and sale under an execution.

CARL F. LOMB.

Sworn to before me this 15th day of February, 1898.

HORACE A. McGUIRE,
Notary Public. [SEAL.]

UNITED STATES OF AMERICA, }
State of New York, County of Monroe, } *ss:*

Philip H. Yawman, above named, named in and who executed the foregoing undertaking as surety, being duly sworn, says that he is a resident of Rochester, Monroe county, New York, and a householder and freeholder in said State aforesaid, and is worth the sum of forty thousand dollars ($40,000) over and above all the debts and liabilities he owes or has incurred and exclusive of property exempt by law from levy and sale under an execution.

PHILIP H. YAWMAN.

Sworn to before me this 15th day of February, 1898.

HORACE A. McGUIRE,
Notary Public. [SEAL.]

Approved February 17th, 1898.
By the court:
M. F. MORRIS,
Associate Justice.

Endorsed: Court of Appeals D. C., January term, 1898. No. 727. The Office Specialty Manufacturing Company, appellant, *vs.* Fenton Metallic Manufacturing Company. Supersedeas bond on appeal to Supreme Court of the United States. Court of Appeals, District of Columbia. Filed Feb. 17, 1898. Robert Willett, clerk.

320 UNITED STATES OF AMERICA, *ss:*

To Fenton Metallic Manufacturing Company, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, at Washington, within 30 days

from the date hereof, pursuant to an order allowing an appeal filed in the clerk's office of the Court of Appeals of the District of Columbia, wherein The Office Specialty Manufacturing Company is appellant and you are appellee, to show cause, if any there be, why the decree rendered against the appellant should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable M. F. Morris, associate justice of the Court of Appeals of the District of Columbia, this 17th day of February, in the year of our Lord one thousand eight hundred and ninety-eight.

M. F. MORRIS,
Associate Justice of the Court of Appeals of the District of Columbia.

Service accepted.
CHARLES E. FOSTER,
Solicitor for Fenton Metallic Mfg. Co.

[Endorsed:] Court of Appeals, District of Columbia. Filed Feb. 17, 1898. Robert Willett, clerk.

321 In the Court of Appeals of the District of Columbia.

FENTON METALLIC MANUFACTURING CO., Plaintiff and Appellant, *vs.* OFFICE SPECIALTY MANUFACTURING CO., Defendant and Appellee.	No. 726. Appeal & Cross-appeal.
OFFICE SPECIALTY MANUFACTURING CO., Defendant and Appellant, *vs.* FENTON METALLIC MANUFACTURING CO., Plaintiff and Appellee.	No. 727.

And now comes Office Specialty Manufacturing Company, the above-named defendant, and says that in the record and proceedings in this cause there is manifest error, in this, to wit:

I. That the Court of Appeals of the District of Columbia erred in holding letters patent No. 450,124 to be good and valid in law.

II. That said court erred in holding that Horace J. Hoffman was the original and first inventor of the invention described and claimed in said letters patent No. 450,124.

III. That said court erred in holding that defendant had infringed claims 1 and 2 of said letters patent No. 450,124 by using and vending roller shelves such as illustrated in "Figure 17 of Complainant's Exhibit Office Specialty Manufacturing Company's Catalogue."

IV. That said court erred in holding that defendant had infringed claims 1 and 2 of said letters patent No. 450,124 by using and vending roller shelves such as illustrated in "Complainant's Exhibit Hansmann's Sketch."

V. That said court erred in holding that the defendant had in-

fringed claims 1 and 2 of said letters patent No. 450,124 by using and vending roller shelves such as illustrated in "Exhibit New No. 4 Roller Shelf."

322 VI. That the said court erred in overruling defendant's first exception to the auditor's report, reading as follows:

First exception. For that the said auditor in his said report found that the shelves of the form and description illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and of the form and description illustrated in "Exhibit Hansmann's Sketch" were sold by the defendant at an average price of $2.27 per shelf in combination with cases, whereas he should have found that he was unable to ascertain what was the average selling price of said shelves in combination with cases, and that there was no competent evidence from which to determine such average selling price.

VII. That the said court erred in overruling defendant's second exception to the auditor's report, reading as follows:

Second exception. For that the said auditor in his said report found that the average cost to the defendant of the manufacture of shelves of the form and description illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and of the form and description illustrated in "Exhibit Hansmann Sketch," in combination with cases, was 99 cents per shelf, whereas he should have found that he was unable to find from the evidence what such cost of manufacture was.

VIII. That the said court erred in overruling defendant's third exception to the auditor's report, reading as follows:

Third exception. For that the said auditor in his said report found that the estimated average cost price to defendant of the shelves alone was 49½ cents per shelf (the same being one-half of the estimated average cost of shelf and case together), whereas, in view of the certain and explicit evidence afforded by "Exhibit Shelves Without Cases," and defendant's statement of Nov. 20, 1896, page 156, Auditor's Report, showing that the lowest actual cost price to the defendant of any shelf without a case was 70 cents per shelf and the average cost price of 2,206 shelves without cases was

323 a fraction over 87 cents per shelf, he should have found that the average cost price to defendant of a shelf alone was not less than 87 cents and a fraction.

IX. That the said court erred in overruling defendant's fourth exception to the auditor's report, reading as follows:

Fourth exception. For that the said auditor in his said report found that the new No. 4 roller shelf is substantially the same in form and description as the shelf illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and in "Exhibit Hansmann Sketch" and an infringement of claims 1 and 2 of the Hoffman patent in suit, whereas he should have found that said new No. 4 roller shelf was substantially different from said above-mentioned exhibit shelves and not an infringement of said claims 1 and 2 of the Hoffman patent in suit.

X. That the said court erred in overruling defendant's fifth exception to the auditor's report, reading as follows:

Fifth exception. For that the said auditor in his said report found that the average gross proceeds of the sales attributable to the shelves separately from cases is $1.135 per shelf, whereas he should have found that he was unable to ascertain from the evidence the average gross proceeds.

XI. That the said court erred in overruling defendant's sixth exception to the auditor's report, reading as follows:

Sixth exception. For that the said auditor in his said report found that the average cost of manufacture of said shelves separate from cases is .495 per shelf, whereas he should have found from the evidence afforded by "Exhibit Shelves Without Cases" and defendant's statement of November 20, 1896, page 156, Auditor's Record, that the average cost of manufacture of said shelves separate from cases was not less than 87 cents and a fraction per shelf.

XII. That the said court erred in overruling defendant's seventh exception to the auditor's report, reading as follows:

324 Seventh exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the 25 shelves like "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," to September 1, 1896, to be $5.125, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves.

XIII. That the said court erred in overruling defendant's eighth exception to the auditor's report, reading as follows:

Eighth exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the shelves described in "Exhibit Hansman Sketch" to be $5,775.05, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves.

XIV. That the said court erred in overruling defendant's ninth exception to the auditor's report, reading as follows:

Ninth exception. For that the said auditor in his said report found the net profits realized by the defendant from the sale of the shelves designated as new No. 4 roller shelf to September 1, 1896, to be $4,777.53, as shown in Schedule D, whereas he should have found that defendant had realized no profits from the sale of said shelves.

XV. That the said court erred in overruling defendant's tenth exception to the auditor's report, reading as follows:

Tenth exception. For that the said auditor in his said report refused to consider the testimony of Alexander S. Steuart, an expert witness called by defendants, on the question of the infringement of the new No. 4 shelf, whereas he should have considered and given due weight to said testimony on said question.

XVI. That the said court erred in overruling defendant's eleventh exception to the auditor's report, reading as follows:

Eleventh exception. For that the said auditor in his said report refused to consider the testimony of the said Alexander S. Steuart respecting the prior state of the art in relation to claims 1 and 2 of the Hoffman patent in suit and the bearing of said claims
325 on the alleged infringement new No. 4 shelves, whereas said

auditor should have considered and duly weighed said testimony on said question.

XVII. That the said court erred in overruling defendant's twelfth exception to the auditor's report, reading as follows:

Twelfth exception. For that the said auditor in his said report has awarded plaintiff profits alleged to have been realized by the defendant, notwithstanding it appears from the bill of complaint and evidence offered by the plaintiff that the plaintiff manufactures under the Hoffman patent in suit, and neither the bill nor the evidence discloses that the plaintiff has marked its article made under said patent with the word "patented," together with the day and year the patent was granted, nor that the defendant was duly notified of its infringement and continued after such notice to make, use, or vend the article so patented, whereas he should have refused to award any profits or damages because of the inhibition of sec. 4900, Revised Statutes.

XVIII. That the said court erred in affirming so much of the decree of the supreme court of the District of Columbia as was appealed from by the defendant, Office Specialty Manufacturing Company, and in reversing so much of said decree as was appealed from by the complainant, Fenton Metallic Manufacturing Company; that it erred in decreeing the cost of both said appeals should be paid by said defendant, and further erred in remanding said cause to the supreme court of the District of Columbia, with directions to reform the decree of that court by vacating so much thereof as sustains the exceptions to the auditor's report and by decreeing recovery by the complainant of the amount reported by the auditor as damages on account of the infringement of its patent by defendant's "new No. 4 shelf."

XIX. That the said court erred in awarding an injunction against said defendant.

326 XX. That the said court erred in not dismissing the plaintiff's bill of complaint for want of equity, with costs to the defendant.

Wherefore the said defendant prays that the said decree aforesaid may be wholly reversed and the said supreme court of the District of Columbia be directed to enter a decree dismissing the plaintiff's bill for want of equity, with costs to the defendant.

MELVILLE CHURCH.
JOSEPH B. CHURCH.

February 17, 1898.

Endorsed: Court of Appeals D. C., January term, 1898. No. 727. The Office Specialty Manufacturing Company, appellant, *vs.* Fenton Metallic Manufacturing Company. Appellant's assignment of errors. Court of Appeals, District of Columbia. Filed Feb. 17, 1898. Robert Willett, clerk.

327 Court of Appeals of the District of Columbia.

I, Robert Willett, clerk of the Court of Appeals of the District of Columbia, do hereby certify that the foregoing printed and typewritten pages, numbered from 1 to 326, inclusive, contain a true copy of the transcript of record and proceedings of said Court of Appeals in the case of Fenton Metallic Manufacturing Company, appellant, *vs.* The Office Specialty Manufacturing Company, No. 726, and The Office Specialty Manufacturing Company, appellant, *vs.* Fenton Metallic Manufacturing Company, No. 727, January term, 1898, as the same remains upon the files and records of said Court of Appeals.

Seal Court of Appeals, District of Columbia.

In testimony whereof I hereunto subscribe my name and affix the seal of said Court of Appeals, at the city of Washington, this 5th day of March, A. D. 1898.

ROBERT WILLETT,
Clerk of the Court of Appeals of the District of Columbia.

Endorsed on cover: Case No. 16,812. District of Columbia Court of Appeals. Term No., 253. The Office Specialty Manufacturing Company, appellant, *vs.* The Fenton Metallic Manufacturing Company. Filed March 7, 1898.

Supreme Court of the United States.

OCTOBER TERM, 1898.

No. 253.

OFFICE SPECIALTY MANUFACTURING COMPANY,
Appellant,

vs.

FENTON METALLIC MANUFACTURING COMPANY,
Appellee.

Appeal from the Court of Appeals of the District of Columbia.

This is a suit in equity brought by the Fenton Metallic Manufacturing Company, against the Office Specialty Manufacturing Company, for infringement of letters patent No. 450,124, granted April 7, 1891, to the plaintiff, as the assignee of the inventor, H. J. Hoffman, for Improvements in Storage Cases for Books, etc.

An interlocutory decree was passed by the Supreme Court of the District of Columbia on the 3rd day of June, 1893, holding the Hoffman patent to be valid as to its first and second claims, and holding, further, that the defendant by the manufacture and sale of roller shelves like the shelf illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17,"

and like the shelf shown in "Exhibit Hansmann's Sketch," infringed said first and second claims, and the cause was referred to the Auditor to take and state an account of the profits and damages growing out of the said infringements.

Proceedings were in due course commenced before the Auditor, but the plaintiff, not satisfied with adducing proof as to the profits and damages growing out of the manufacture and sale of shelves by the defendant like those specifically passed upon by the court and mentioned in the interlocutory decree, endeavored to show that a shelf made by defendant subsequent to the interlocutory decree and known in the cause as "Defendant's New No. 4 Shelf" was also an infringement of the patent in suit and, against defendant's objection, requested the Auditor to take an account respecting said new shelf.

On the question of the alleged new infringement, the Auditor was somewhat embarrassed by the fact that his Honor, Judge Bingham, who had passed the interlocutory decree of June 3, 1893, had filed no opinion indicating what was, in his judgment, the true construction to be given to the patent in suit. Nevertheless, the Auditor proceeded to determine the issue as best he could. He found that the defendant's New No. 4 Shelf was an infringement of claims 1 and 2 of the plaintiff's patent; he found that the plaintiff was entitled to no damages whatever growing out of the manufacture and sale by the defendant of either of the forms of shelves complained of; and he further found that defendant had made a profit from the manufacture and sale of each kind of shelf complained of. He embodied his findings in a report found in the record (p. 283).

To this report defendant filed twelve exceptions (p. 296).

After a hearing upon defendant's exceptions, His Honor, Judge Cox, in an interlocutory decree dated April 5, 1897, allowed the 4th and 9th Exceptions, relating to the alleged new infringement, which he held the Auditor had no authority

to inquire into, and overruled the 1st, 2nd, 3rd, 5th, 6th, 7th, 8th and 12th Exceptions, affirming the report excepting as to the matters set forth in the said 4th and 9th Exceptions (p. 298). Subsequently a final decree was entered confirming the interlocutory decrees of June 3, 1893, and April 5, 1897, and requiring that the defendant pay to the plaintiff the sum of $5.780.17, with interest from the 15th day of January, 1897, the date when the report of the Auditor was submitted to the court, and also the costs of the suit. From all of this final decree, excepting the portion thereof sustaining defendant's Exceptions Nos. 4 and 9, the defendant appealed to the Court of Appeals of the District of Columbia, and the plaintiff, by cross appeal, appealed from so much of said final decree as sustained said Exceptions 4 and 9.

The Court of Appeals in determining the appeal and cross appeal affirmed so much of the decree of the Supreme Court of the District of Columbia as was appealed from by the defendant, and reversed so much of said decree as was appealed from by the plaintiff, and remanded the cause to the court below with directions to reform the decree below by vacating so much thereof as sustained the defendant's exceptions to the Auditor's report and by decreeing recovery by the complainant of the amount reported by the Auditor as owing on account of the infringement of its patent by the defendant's "New No. 4 Shelf." The effect of this decree of the appellate court was to add to the amount awarded by the court below, i. e. $5,780.17, with interest from January 15th, 1897, the amount found due by the Auditor, growing out of the manufacture and sale by defendant of the "New No. 4 Shelf," i. e. $4,777.53, making the total award $10,557.70, with interest. From the decree of said Court of Appeals this appeal is taken under Section 8, of the Act of February 9, 1893, establishing said Court of Appeals (27 Stat. p. 434) which provides:

> "Sec. 8. That any final judgment or decree of the said Court of Appeals may be re-examined and

> affirmed, revised, or modified by the Supreme Court of the United States, upon writ of error or appeal, * * * in cases, without regard to the sum or value of the matter in dispute, wherein is involved the validity of any patent or copyright * * *."

The appellant relies upon the following assignments of error, viz:

I. That the Court of Appeals of the District of Columbia erred in holding letters patent No. 450,124, to be good and valid in law.

II. That said court erred in holding that Horace J. Hoffmann was the original and first inventor of the invention described and claimed in said letters patent No. 450,124.

III. That said court erred in holding that defendant had infringed claims 1 and 2 of said letters patent No. 450,124, by using and vending roller shelves such as illustrated in "Figure 17 of Complainants Exhibit Office Specialty Manufacturing Company's Catalogue."

IV. That said court erred in holding that defendant had infringed claims 1 and 2 of said letters patent No. 450,124, by using and vending roller shelves such as illustrated in "Complainant's Exhibit Hansmann's Sketch."

V. That said court erred in holding that the defendant had infringed claims 1 and 2 of said letters patent No. 450,124, by using and vending roller shelves such as illustrated in "Exhibit New No. 4 Roller Shelf."

VI. That the said court erred in overruling defendant's first exception to the Auditor's Report, reading as follows:

> *First Exception.*—For that the said Auditor in his said report found that the shelves of the form and description illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and of the form and description illustrated in "Exhibit Hansmann Sketch" were sold by the defendant at an average price of $2.27 per shelf in combination with cases, whereas he should have found that he was unable to ascertain what was

the average selling price of said shelves in combination with cases, and that there was no competent evidence from which to determine such average selling price.

VII. That the said court erred in overruling defendant's second exception to the Auditor's Report, reading as follows:

Second Exception.—For that the said Auditor in his said report found that the average cost to the defendant of the manufacture of shelves of the form and description illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, No. 17," and of the form and description illustrated in "Exhibit Hannsman Sketch" in combination with cases was 99 cents per shelf, whereas he should have found that he was unable to find from the evidence what such cost of manufacture was.

VIII. That the said court erred in overruling defendant's third exception to the Auditor's Report, reading as follows:

Third Exception.—For that the said Auditor in his said report found that the estimated average cost price to defendant of the shelves alone was 49½ cents per shelf (the same being one-half of the estimated average cost of shelf and case together), whereas, in view of the certain and explicit evidence afforded by "Exhibit Shelves Without Cases," and defendant's statement of November 20, 1896, page 156, Auditor's Record, showing that the lowest actual cost price to the defendant of any shelf without a case was 70 cents per shelf and the average cost price of 2,206 shelves without cases was a fraction over 87 cents per shelf, he should have found that the average cost price to defendant of a shelf alone was not less than 87 cents and a fraction.

IX. That the said court erred in overruling defendant's fourth exception to the Auditor's Report, reading as follows:

Fourth Exception.—For that the said Auditor in his said report found that the new No. 4 roller shelf is substantially the same in form and description as the shelf illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and in "Exhibit Hansmann Sketch" and an infringement of claims 1 and 2 of the Hoffman patent in suit, whereas he should have found that said

new No. 4 roller shelf was substantially different from said above-mentioned exhibit shelves and not an infringement of said claims 1 and 2 of the Hoffman patent in suit.

X. That the said court erred in overruling defendant's fifth exception to the Auditor's Report, reading as follows:

> *Fifth Exception.*—For that the said Auditor in his said report found that the average gross proceeds of the sales attributable to the shelves separately from cases is $1.135 per shelf, whereas he should have found that he was unable to ascertain from the evidence the average gross proceeds

XI. That the said court erred in overruling defendant's sixth exception to the Auditor's Report, reading as follows:

> *Sixth Exception.*—For that the said Auditor in his said report found that the average cost of manufacture of said shelves separate from cases is .495 per shelf, whereas he should have found from the evidence afforded by "Exhibit Shelves Without Cases" and defendant's statement of November 20, 1896, page 156, Auditor's Record, that the average cost of manufacture of said shelves separate from cases was not less than 87 cents and a faction per shelf.

XII. That the said court erred in overruling defendant's seventh exception to the Auditor's Report, reading as follows:

> *Seventh Exception.*—For that the said Auditor in his said report found the net profits realized by the defendant from the sale of the 25 shelves like "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," to September 1, 1896, to be $5.125, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves."

XIII. That the said court erred in overruling defendant's eighth exception to the Auditor's Report, reading as follows:

> *Eighth Exception.*—For that the said Auditor in his said report found the net profits realized by the defendant from the sale of the shelves described in "Exhibit

Hannsman Sketch" to be $5,775.05, as shown in Schedule B, whereas he should have found that defendant had realized no profits from the sale of said shelves.

XIV. That the said court erred in overruling defendant's ninth exception to the Auditor's Report, reading as follows:

> *Ninth Exception.*--For that the said Auditor in his said report found the net profits realized by the defendant from the sale of the shelves designated as New No. 4 roller shelf to September 1, 1896, to be $4,777.53, as shown in Schedule D, whereas he should have found that defendant had realized no profits from the sale of said shelves.

XV. That the said court erred in overruling defendant's tenth exception to the Auditor's Report, reading as follows:

> *Tenth Exception.*—For that the said Auditor in his said report refused to consider the testimony of Alexander S. Steuart, an expert witness called by defendants, on the question of the infringement of the new No. 4 shelf, whereas he should have considered and given due weight to said testimony on said question.

XVI. That the said court erred in overruling defendant's eleventh exception to the Auditor's Report, reading as follows:

> *Eleventh Exception.*—"For that the said Auditor in his said report refused to consider the testimony of the said Alexander S. Steuart respecting the prior state of the art in relation to claims 1 and 2 of the Hoffman patent in suit and the bearing of said claims on the alleged infringing New No. 4 shelves, whereas said Auditor should have considered and duly weighed said testimony on said question.

XVII. That the said court erred in overruling defendant's twelfth exception to the Auditor's Report, reading as follows:

> *Twelfth Exception.*—For that the said Auditor in his said report has awarded plaintiff profits alleged to have been realized by the defendant, notwithstanding it appears from the bill of complaint and evidence offered by the plaintiff that the plaintiff manufactures under the

Hoffman patent in suit, and neither the bill nor the evidence discloses that the plaintiff has marked its article made under said patent with the word "patented," together with the day and year the patent was granted, nor that the defendant was duly notified of its infringement and continued after such notice to make, use, or vend the article so patented, whereas he should have refused to award any profits or damages because of the inhibition of Sec. 4900, Revised Statutes.

XVIII. That the said court erred in affirming so much of the decree of the Supreme Court of the District of Columbia as was appealed from by the defendant, Office Specialty Manufacturing Company, and in reversing so much of said decree as was appealed from by the complainant, Fenton Metallic Manufacturing Company; that it erred in decreeing the cost of both said appeals should be paid by said defendant and further erred in remanding said cause to the Supreme Court of the District of Columbia, with directions to reform the decree of that court by vacating so much thereof as sustains the exceptions to the Auditor's Report and by decreeing recovery by the complainant of the amount reported by the Auditor as damages on account of the infringement of its patent by defendant's "New No. 4 Shelf."

XIX. That the said court erred in awarding an injunction against said defendant.

XX. That the said court erred in not dismissing the plaintiff's bill of complaint for want of equity with costs to the defendant.

It is proper at this point to state that the Hoffman patent in suit has been also adjudicated in the United States Circuit for the Southern District of New York in Fenton Metallic Mfg. Co. *vs.* Chase, *et al.* On a motion to vacate a default order for a preliminary injunction in that cause, Judge Lacombe doubted the validity of the patent and vacated the injunction, (73 Fed. 831) and on final hearing upon full pleadings and proofs, Judge Wheeler held the patent invalid for want of

novelty in the invention and dismissed the bill. (84 Fed. 893.)

This case, therefore, in effect, calls for a review by this court of the conflicting opinions of the Court of Appeals of the District of Columbia and of the United States Circuit Court for the Southern District of New York.

THE HOFFMAN PATENT IN SUIT IS INVALID.

Appellant's first point is, that the patent in suit is invalid and void for lack of patentable invention in the subject-matter. This, if determined in its favor, is decisive of the whole case.

Although the title of the patent is "Improvements in Storage Cases for Books," the particular contrivance alleged to be protected by the claims, (1 and 2) put in issue is what is known as a roller shelf, which may be defined generally, as a shelf provided with rollers for facilitating the introduction and withdrawal of heavy books from a book case provided with such shelves and having a hand space or recess for enabling the back of the book to be readily grasped. At the date of Hoffman's application for patent—for that date in the absence of other proof must be taken to be the date of his alleged invention—roller shelves had already gone into extensive use and numerous patents had been granted for various improvements in them.

HARRIS PATENT OF 1870.

Patent to Harris, (p. 143–144), No. 107,042, of September 6, 1870, (now public property), shows a roller-shelf for record books consisting of a frame-work in which are mounted three parallel rollers that are adapted to support a book, the free rotation of the rollers serving to facilitate the introduction and removal of the books to and from the shelf.

BOONE PATENT OF 1876.

Patent to Boone, (p. 145), No. 182,157, dated September 12, 1876, (also public property), shows a book case having

at the front edge of each of its shelves a roller arranged so that when a book is withdrawn from or placed upon the shelf it will move over a roller instead of over the edge of the shelf.

The patentee says:

> The edges of book shelves are ordinarily made sharp, so that a book which is frequently taken down from and replaced upon the shelves, soon becomes worn out, its lower edges being destroyed by the sharp corners of the shelves on which it is dragged, especially if the shelf upon which it is kept is higher than the level of the person's head who handles it or if the books are very heavy, such as books of record and heavy account books.
>
> To obviate the difficulty, I insert a roller. C, just in front of the edge of each shelf, so that the lower edges of the book will rest upon and roll over the roller both when the books are being taken down from the shelf or placed upon it.

WOLFE PATENT OF 1879.

Patent to Wolfe (p. 147), No. 220,265, dated October 7, 1879 (also public property), shows a bookcase in which several series of rollers are employed to afford the support for a book placed upon the shelf, each series of rollers being supported on what the patentee terms a "box," so that the rollers may have free rotation, and also so that the hand of the operator may be introduced between the series of rollers in order to more readily grasp the back of the book, either in removing it or returning it to its place, without liability of the fingers being caught by any portion of the shelf.

The specification states (p. 148):

> The object of this invention is to provide means to hold heavy record books and other tomes, which will lessen the labor and impairing of the books while handling them, and admit of their removal and replacement, so as to prevent wear and chafing of the books and the breaking away of the leaves from each other and the cover; and to these ends it consists of a bracket provided with a series of rolls hung in a box, having a right-

angled plate united thereto by a web, substantially as hereinafter more fully set forth.

* * * * * * *

Wear, chafing, and other destructive effects to the books, besides the labor, etc., are greatly reduced by my improvements. As a rule, I place the books in the case directly upon the rollers, but, if desired, a supplemental shelf, C, may be employed, itself resting upon the rollers.

* * * * * * *

By sliding the books upon their sides into the case and upon the rollers all the advantages hereinbefore referred to as to the saving of the books and lessening of the labor in handling them are obtained.

CONANT PATENT OF 1885.

Patent to Conant (p. 148), No. 316,241, dated April 21, 1885, shows roller shelves, each consisting of a series of longitudinal parallel rollers forming the support for the book, the front rollers being placed forward of all portions of the framework so as to enable the book, when introduced upon or withdrawn from the shelf, to rest wholly upon such front roller without possibility of abrasion by contact with any other portion of the shelf or casing.

The specification states (p. 150):

> The rollers FF′ are made of a diameter a little greater than the thickness of the strips E and binding bars G, so that the books while being put into and removed from the bookcase will not come in contact with anything but the said rollers FF′, and will thus be prevented from being rubbed or marred by coming in contact with the stationary parts of the bookcase.

ADAMS' PATENT OF 1886.

Patent to Adams (p. 151), No. 338,459, dated March 23, 1886, shows a roller shelf provided with a series of parallel rollers for supporting the book, the front rollers being supported upon arms which are bent or carried back so as to per-

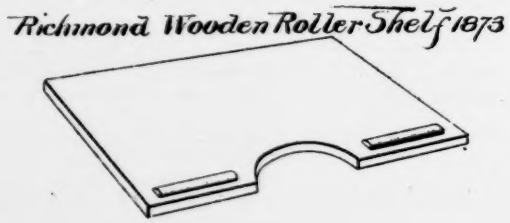
mit of the introduction of the hand between the front rollers and thus facilitate the insertion or withdrawal of the book without liability of contact of the fingers with any portion of the shelf or casing.

SHELVES IN COURT-HOUSE, RICHMOND, IND.

The evidence shows that there were in use at the court-house at Richmond, Indiana, in the year 1873, and thereafter, roller shelves for books, consisting of a wooden shelf having the ordinary hand hole at the front to enable the back of the book to be readily grasped and provided with rollers let into openings on each side of the hand hole for supporting the book and facilitating its introduction and withdrawal.

The existence of these shelves, and their use by the hundred, is testified to by M. R. Jewell (Q. 146, *et seq.*, p. 51), and also by Col. William W. Dudley (p. 70), who was clerk of the court at Richmond in 1873 and thereafter, and who was instrumental in having the shelves put in.

One of the original roller shelves, taken from the Richmond court-house, was offered in evidence as Defendant's Exhibit M. R. J. No. 1. The following sketch illustrates its construction:



ROLLER SHELVES COMPOSED OF PORTABLE OPEN METALLIC SUPPORTING FRAMES AND METAL ROLLERS.

The evidence also shows that prior to the date of the alleged Hoffman invention roller shelves composed of portable open metallic supporting frames and straight metal rollers extending from end to end of the frames were made and sold and used in large numbers and are still made and sold in competition with the Hoffman shelf.

One form of this prior shelf is shown in Fig. 16 of "Complainants Exhibit Office Specialty Manufacturing Company Catalogue" opposite p. 82, which is here reproduced.

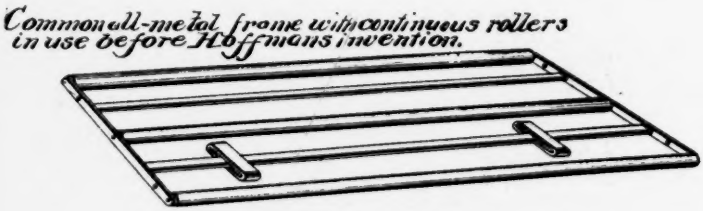


Fig. 16. Roller Book-Shelf, Style No. 3.

Mr. Freeman, plantiff's expert, testifies of this prior shelf as follows, (p. 11):

> Prior to the date of the Hoffman application, to-wit, February 12, 1887, it was common to use what were called roller shelves, the same consisting of frames or supports and longitudinal parallel rollers, which extended the entire length of the shaft and served to reduce friction in putting books upon and withdrawing them from the shelf. One form of such shelves is

shown in Complainants Exhibit Office Specialty Manufacturing Company's Catalogue on p. 14 thereof, Fig. 16.

Mr. Hine, the manager of the plaintiff corporation, testifying on the 3d of March, 1892, says as follows, (p. 31):

> I have been employed in the sale of metallic office fixtures, including shelving, for six years, and for four years have been engaged in the manufacture as well as the sale of such fixtures.
>
> At the time I became engaged in the business of selling office furniture and fixtures there were sold upon the market and put in and used, roller shelves having metallic frames and straight rollers extending the whole length of the shelf.

Again, (p. 38):

> X-Q. 19. At the time of the application of the Hoffman patent in suit portable roller shelves having rigid metal frames adapted to be screwed fast at their ends to the sides of the case were a common article of manufacture in various forms, are they not?
>
> A. I think they were. That might be qualified to a certain extent, as while roller shelves were common, roller shelves in which the rollers were supported by a frame independent of the upright were not very common.
>
> X-Q. 20. But prior to the application of the patent in suit shelves containing rollers having rigid metal frames adapted to be fastened to the sides of the case in practically the same manner that the shelf now in suit was fastened were sold in the market by different makers?
>
> A. Yes, sir.

RESUME OF THE PRIOR ART.

The prior art as developed by the above mentioned patents and proven prior uses therefore shows:

1. That it was not new at the date of the Hoffman invention to provide book shelves with rollers for sustaining the books and facilitating their entrance and withdrawal. This is shown

by the Harris, Boone, Wolfe, and Adams patents, the Richmond Shelf, and Defendant's Shelf, like Fig. 16 "Complainants Exhibit Office Specialty Company's Catalogue."

2. That it was not new to provide roller shelves with rollers placed at the front edges of the shelves so as to project above and in front the shelves. This is shown in the Boone, Conant and Adams patents and in the Defendants Shelves, like Fig. 16 of the aforesaid Exhibit Catalogue.

3. That it was not new to provide roller shelves with hand holes or recesses between the supporting rollers for the purpose of enabling the insertion of the hand to better grasp the book. This is shown in the Wolfe and Adams patents and in the Richmond shelf.

4. That it was not new to provide roller shelves with hand holes or recesses between front supporting rollers projecting above and forward of the edges of the shelves. This is shown in the Adams patent.

5. That it was not new in roller shelves to employ a wholly metallic open portable and attachable framework in connection with book supporting rollers made wholly of metal with the front rollers projecting above and forward of the edges of the shelves. This is shown in the defendants roller shelves, like Fig. 16 of Complainant's Exhibit Office Specialty Company's Catalogue, and is admitted by plaintiffs expert and by its general manager to be old, as hereinabove pointed out.

THE ALLEGED INVENTION OF HOFFMAN.

Notwithstanding this highly developed art, it is contended on behalf of the plaintiff that Hoffman made a great invention in roller shelves when he combined in one structure (1) a wholly metallic open, portable and attachable frame, (2) rollers mounted in said frame for supporting the books, the forward roller being supported and projecting above and in front of the front edge of the frame, and (3) a recess between the separated front rollers constituting a hand-hole for grasping the books.

There is not the slightest merit in this contention. Every element of the pretended new structure was old.

All the advantages of a wholy metallic frame were and are attained in the metal frame of the old metallic roller shelves in which a continuous front roller, without a hand-hole, are employed; all the advantages of separated front rollers were attained in the prior Adams shelf and in the prior Richmond shelf; and all the advantages of a hand-hole or recess for the fingers in grasping a book were attained by all prior shelves having hand-holes—from the plain wooden hand-hole shelf of antiquity, found in the desks and bookcases of our forefathers, of which this court will take judicial notice, to the hand-hole roller shelf of the Wolfe and Adams patents, and of the Richmond court house.

Hoffman didn't make any invention, he simply brought together in a single structure the old, well-known elements of prior structures. Given, the prior all-metal roller shelf like Fig. 16, of Defendant's Catalogue, with its attachability and detachability from its supporting case, with its all-metal frame, its metal rollers extending longitudinally from end to end of the frame and its front roller projecting above and forward of any part of the frame, and given, also the desirability of applying to such all-metal construction a hand-hole for the only purpose for which a hand-hole has ever been employed, *i. e.*, to enable the hand to be introduced, it is perfectly obvious that any skilled mechanic would have no difficulty in applying such a hand-hole to such a structure, and would do so by cutting out the middle portion of the front roller, suitably supporting the inner ends of the parts and utilizing the recess or space so left as the hand-hole, and this without the slightest exercise of the inventive faculty.

Hoffman occupied precisely the position of the skilled mechanic in the case supposed. Hand-holes and hand-holes for roller shelves were old and known to him, so were all-metallic roller shelves. He simply undertook to apply the old hand-

hole to the old all-metallic roller shelf, and in doing so did what it is obvious any other mechanic might and would have done without the exercise of anything more than the mere expected skill of his calling. He did nothing rising to the dignity of invention, and his patent is invalid under the rulings of this court in the following cases:

> Atlantic Works *vs.* Brady, 107, U. S. 192; Slawson *vs.* Grand Trunk R. R. Co., 107, U. S 649; King *vs.* Gallum, 109, U. S. 99; Double Pointed Track Co. *vs.* Two Rivers Mfg. Co., 109, U. S. 117; Estey *vs.* Burdett, 109, U. S. 633; Bussey *vs.* Excelsior Mfg. Co., 110, U. S. 131; Penn. R. R. Co. *vs.* Locomotive & Truck Co., 110, U. S. 490; Phillips *vs.* City of Detroit, 111, U. S. 604; Morris *vs.* McMillan, 112, U. S. 244; Hollister *vs.* Benedict & Burnham Mfg. Co., 113, U. S. 59; Thompson *vs.* Boisselier, 114, U. S. 1; Stephenson *vs.* R. R. Co., 114, U. S. 149; Mfg. Co. *vs.* Greenleaf, 117, U. S. 554; Gardner *vs.* Hurz, 118, U. S. 180; Pomace Holder Co. *vs.* Ferguson, 119, U. S. 335; Handy *vs.* Iron Works, 127, U. S. 370; Holland *vs.* Shipley, 127, U. S. 396; Plow Co. *vs.* Kingman, 129, U. S. 294; Brown *vs.* District of Columbia, 130, U. S. 87; Day *vs.* R R. Co. 132. U. S. 161; Marchand *vs.* Emken, 132, U. S. 201; Hill *vs.* Wooster, 132, U. S. 693; Busell Trimmer Co. *vs.* Stevens, 137, U. S. 423; McClain *vs.* Ostmayer, 141, U. S. 419; Mfg. Co. *vs.* Carey, 147, U. S. 623; Grant *vs.* Walter, 148, U. S. 547; Black Diamond Coal Mining Co. *vs.* Excelsior Coal Co., 156 U. S. 611; Richards *vs.* Chase Elevator Co., 158, U. S. 299.

THE CLAIMS OF THE HOFFMAN PATENT NOT FOR LEGITIMATE COMBINATIONS, BUT FOR MERE AGGREGATIONS OF OLD MECHANICAL FEATURES.

The claims of the Hoffman Patent are, in form, for combinations of parts, but the elements do not in fact combine, in a patent law sense. They are merely aggregated, and perform their old functions, and only their old functions, in the same

old way. This is self-evident. The open, all-metal frame is light and ventilated as in prior structures, unmodified by the presence of the hand space, the rollers perform their old function of preventing abrasion and facilitating the entry and removal of books, and the hand space, just as always, affords opportunity for the fingers to take a firmer grasp on the back of the book. The front rollers operate precisely the same, whether the hand space be present or absent. Remove the rollers and the hand space will function as before. Neither modifies the other; each performs its alloted duty, whether or not the other be present.

To say that the hand space is combined with the rollers because it enables the fingers to be thrust back of the rollers, is misleading. The real object of the hand space in this aggregation is to enable the fingers to obtain a firmer grasp on the back of the book—the passing of the fingers beyond the plane of the rollers being merely incidental.

That a mere aggregation is not patentable is a proposition that does not, in this court, require the support of any argument.

> Hailes *vs.* Van Wormer, 20 Wall., 353–368; Reckenderfer *vs.* Faber, 92 U. S., 347–356; Phillips *vs.* City of Detroit, 111 U. S., 604; Brinkerhoff *vs.* Aloe, 146 U. S., 515–517; Palmer *vs.* Village of Corning, 156 U. S., 342–345; Richards *vs.* Elevator Co., 158 N. Y., 299–302.

This argument was addressed to Judge Wheeler in the Chase suit and was found by that learned judge to be sound and, in view of it, he declared the Hoffman claims invalid.

He said (84 Fed., 893):

> This case was before this court, held by Judge Lacombe, on a motion to dissolve an injunction, and the patent was then much considered, 73 Fed., 831. Not much more has been made to appear new and little more seems necessary to be said. The hand recess was well known before Hoffman's supposed invention, and its use

is the same in one form as in another of such a book-case. Rollers were known for relieving the books and their supports from friction, and so were rollers at each side of room for handling the books. Rollers at each side of the hand recess in front of and above the frame may be new in that exact position, but they operate there as such rollers had done before, and no differently because of any relation to the hand recess formed of the frame. There does not seem to be any new working combination in either of these claims. Bill dismissed.

IF VALID AT ALL THE PATENT IN SUIT IS AN EXCEEDINGLY NARROW AND LIMITED ONE.

The patent itself and the history of the application for it show, conclusively, that the invention covered by the first and second claims if invention at all, is of the narrowest possible description. In the preamble to the specification the patent says (p. 101):

> The object of my invention is to facilitate the handling and preventing the abrasion and injury of heavy books, etc. It consists essentially of the *peculiar arrangement* of the guiding and supporting rollers and of the *peculiarities in the construction of the casing and shelves hereinafter specifically set forth.*

This is clearly not a statement respecting a pioneer or basic invention, but a general description of a very narrow invention whose novelty resides in "peculiarities" of construction such as are "specifically" set forth further on in the patent.

The two claims of the patent alleged to be infringed are as follows (p. 102):

> 1. In a storage case for books, etc., the combination of a supporting rack or shelf composed of metallic strips and having a re-entrant bend or recess in its front edge and rollers journaled in said rack and projecting above and in front of the same on each side of said bend or recess; substantially as described.
>
> 2. In a book shelf, the combination of a supporting frame, a series of horizontal rollers, the front roller in

two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections; substantially as described.

It will be noted that in the first claim the shelf is described as being composed "of metallic strips and having *a re-entrant bend or recess in its front edge*," while in the second claim the same peculiar construction is referred to by the phrase "the intermediate part of the frame being *carried back* to permit the admission of the hand between said roller sections."

This re-entrant bend or carried back portion of the frame is referred to in the body of the specification as follows (p. 102):

> The middle U-shaped section c^2 is attached at its ends to the rear section c and extends from the back to the front of the case, parallel with the sections c^1, c^1, and forms the center of the front side of the frame, which is bent inwardly at c^4, thus exposing a portion of the book to the grasp and facilitating its removal from the case.

It appears from the file wrapper and contents of the application for the Hoffman patent (a copy of which is in evidence) that Hoffman at first conceived himself to be entitled to broader claims than were ultimately granted him.

For instance, some of his original claims read as follows (p. 85):

> 1. In a storage case for books, etc., a supporting shelf or rack provided with a roller the face of which projects beyond the edge of said shelf or rack; substantially as and for the purpose set forth.
>
> 2. In a storage case for books, etc., supporting racks each composed of a roller frame and rollers mounted therein projecting above and below said frame; substantially as and for the purpose set forth.
>
> 3. In a storage case for books, etc., supporting racks each composed of a frame formed with a re-entrant bend or recess in its front edge and rollers mounted in said frame; substantially as and for the purpose set forth.

4. In a storage case for books, etc., a rack composed of a frame formed of the back section c, side sections c^1, c^1, middle U-shaped sections c^2 having a re-entrant bend in front, and cross sections c^3, c^3 connecting the sections c^1, c^1 and rollers journaled in said frame, substantially as and for the purpose set forth.

5. In a storage case for books, etc., a shelf or rack having one or more recesses in its front edge and a roller or rollers set in said recess or recesses with its working face projecting beyond the front edge of said shelf or rack; substantially as described and for the purpose set forth.

8. In a storage case for books, etc., a portable cabinet or case, shelves or racks vertically adjustable in said case and rollers mounted in said shelves or racks; substantially as and for the purpose set forth.

These claims were rejected on the patent to Conant No. 316,241 (p. 87), whereupon they were stricken out and the following claims were introduced by an amendment of November 22, 1887, viz (p. 87):

1. In a storage case for books, etc., the combination of a vertically adjustable supporting shelf or rack and the roller journaled in said shelf or rack and projecting beyond the front edge thereof; substantially as and for the purpose set forth.

3. In a storage case for books, etc., the combination of a rack composed of metallic strips and supporting rollers journaled in and projecting above said rack; substantially as and for the purpose set forth.

8. In a storage case for books, etc., the combination of a supporting rack or shelf composed of metallic strips and having a re-entrant bend or recess in its front edge and rollers journaled in said rack and projecting above and in front of the same on each side of said bend or recess; substantially as and for the purpose set forth.

These claims were rejected on Conant No. 316,241; Adams No. 338,459, and others, and were thereupon cancelled.

From these actions on the part of the Patent Office, followed

by applicant's acquiescence in them, it is clear that it was only intended that Hoffman's protection should be of the most limited character and confined to a roller shelf having a re-entrant bend or recess in its front edge formed by carrying back an intermediate part of the frame.

Further support to this view is found upon examination of the records of the interference that took place in the Patent Office between the Hoffman application and the application of Jewell & Yawman.

This interference was declared on the 25th day of October, 1889, upon the following issue, as appears from "Complainant's Exhibit B," introduced by plaintiff, viz (p. 96):

INTERFERENCE ISSUE.

> In a book shelf the combination of a supporting frame, a series of horizontal rollers carried thereby, a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections.

The alleged interfering structure that was shown in the Jewell & Yawman application is represented in Jewell & Yawman Drawing, (p. 135), and is substantially the same as represented in "Exhibit O. S. Mfg. Co. Catalogue, Figure 17" (p. 82). The claim of Jewell & Yawman and the claims of Hoffman that were alleged to constitute interfering claims are quoted in the decision of the Examiners-in-Chief, on appeal (a copy of which has been offered by the plaintiff as "Complainant's Exhibit D"), and reads as follows (p. 106):

Jewell & Yawman's Claim.

> In a portable roller book shelf, the combination of a rigid portable supporting frame, a series of rollers therein, the front roller divided centrally into two coincident sections, and supported by a retreating bar or support *e*, whereby the admission of the hand between the roller sections is permitted to grasp the book.

Hoffman's Claims.

> In a storage case for books, etc., the combination of a supporting rack or shelf composed of metallic strips and having a re-entrant bend or recess in its front edge, and rollers journaled in said rack and projecting above and in front of the same, on each side of said bend or recess; substantially as and for the purposes set forth.
>
> In a book shelf, the combination of a supporting frame, a series of horizontal rollers, the front roller in two separate sections, the intermediate part of the frame being carried back to permit the admission of the hand between the roller sections; substantially as described.

(Note: These Hoffman claims correspond to the two claims in suit.)

The history of the interference shows that each of the tribunals that passed upon the case regarded the invention in dispute as a very limited one and as restricted to a structure having, technically, a front bar that was bent back or provided with a re-entrant bend, and negatives absolutely the plaintiff's contention that the invention was not so restricted.

In the decision of the Examiner of Interferences (Exhibit C in this cause) (p. 103) there is a discusion of an exhibit that was offered by the claimants, Jewell & Yawman, in support of the issue, but which was ruled out by the Examiner as not being pertinent.*

The Examiner of Interferences said, (p. 104):

> It will be observed from an inspection of the 1886 shelf exhibit that *the front bar of the frame is straight* with short rollers projecting from its front side at or near each end. Such a construction, of course, leaves a space between the rollers in front of the bar, which will permit the admission of the hand when withdrawing a a book from the shelf.

---

* [Note: The exhibit shelf here referred to was not offered in evidence in this suit but it is illustrated in Figs. 1 and 2 of the Jewell & Yawman application found opp. p. 120.]

> It is, however, submitted that no part of the frame is *carried back* to affect this purpose. It is true that the whole frame is back of these two roller sections and in that sense the intermediate part is "carried back" of them, inasmuch as it is carried by the remaining portion of the frame of which it forms a part.
>
> The construction of the issue insisted upon by counsel is believed to be without warrant. A careful reading thereof, it is thought, does not justify it, nor is the Examiner of the opinion that the Primary Examiner, in view of the state of the art, as cited by him while considering the applications here involved, proposed to frame an issue that would be comprehended in a shelf that had a frame with a straight bar having a roller in front, in two separate sections with a space between them. In the Hoffman application, he cites the patent to Adams No. 338,457, March 23, 1886, and certainly he would not declare an interference upon an issue which, if construed as the counsel insists, would be squarely anticipated by it.

In the decision of the Board of Examiners-in-Chief, on appeal (Exhibit D in this cause), the Board said (p. 106):

> From the state of the art as shown in the record and evidence it is evident that only extremely limited and specific claims could be maintained by either party, and such was the view taken by the Primary Examiner. *The issue must, therefore, be strictly construed to embrace literally every specific feature as set forth by the parties in the combination claimed by each.*

Then, after reciting the claims of the respective parties, the opinion goes on to say (p. 107):

> We must consider the "*retreating bar or support e*" an essential feature, and it is so considered by the Examiner in allowing the claim thus specific and limited to stand and go into interference with the Hoffman claims resting on the "*carrying back*" *of the front part of the frame* between the rollers, both being for precisely the same purpose and substantially of the same construction.

Then further on, in speaking of the Jewell & Yawman exhibit having the straight front bar, the opinion proceeds (p. 107):

> It lacks the series of horizontal rollers as set forth and shown and claimed by both parties and embraced in the issue, and has no "intermediate part of the frame" *carried back* to permit the admission of the hand between the roller sections. But instead thereof, there are but three short rollers, one in the extreme rear and two in front, journaled in brackets attached to flat bars which constitute the frame, there being a wide space between the inner ends of the front rollers which are in close contiguity to the front flat bar of the frame, which is straight and forms the "intermediate part between the front rollers," *and is not "carried back"* or *curved* and *has no re-entrant bend or recess in its front edge* to permit the admission of the hand between the roller sections.

When the case came on before the Commissioner of Patents, in person, on appeal, he affirmed the decision of the lower tribunals and said (Exhibit E in this cause) (p. 109):

> A book shelf, in order to contain the combination embraced in the issue must have the following features: (1) a supporting frame, (2) a series of horizontal rollers carried thereby, and (3) a front roller formed in two separate sections, *the intermediate part of the frame being carried back to permit admission of the hand between the roller sections.* These elements are contained in the interfering claims of both parties, *and in view of the prior art*, as developed in the evidence, *the issue must be limited so as to require all of the specific elements mentioned.*

Further on, the Commissioner says, in speaking of the 1886 shelf set up by Jewell & Yawman as containing the invention in issue (p. 110):

> I agree with the Examiners-in-Chief, that *exhibit Jewell & Yawman 1886 shelf does not have the intermediate part of the frame carried back to permit the*

> *admission of the hand between the roller sections, neither does it have the front roller divided centrally into two coincident sections, and supported by a retreating bar or support e,* as set forth in the Jewell & Yawman claim involved in the interference.

From this history of the career of the Hoffman application in the Patent Office, it appears, first, that the carrying or curving back of the front bar of the shelf frame, or in other words, the forming of the re-entrant bend in the front bar of the Hoffman frame was regarded as constituting the very gist and essence of the invention, and it is clear that unless this limitation had been imposed upon the Hoffman claims they would never been granted.

It is further evident from this history that the Patent Office *did not* consider a frame that had a *straight front bar* and separate rollers supported thereon as containing the Hoffman invention. Hoffman's assignee, the plaintiff in this cause, cannot now be heard to say that such limitations are immaterial and may be disregarded.

In Roemer *vs.* Peddie, 132 U. S., 315, this Court said:

> This court has often held that where a patentee on the rejection of his application inserts in his specification in consequence limitations and restrictions for the purpose of obtaining his patent, he cannot after he has obtained it, claim that it shall be construed as it would have been construed if such limitations and restrictions were not contained in it.

Again, in Sargent *vs.* Hall Safe and Lock Co., 114 U. S., p. 63, the court said:

> In patents for combinations of mechanism, limitations, and provisos imposed by the inventor, especially such as were introduced into an application after it has been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon as in the nature of disclaimers.

Again, in Sutter *vs.* Robinson, 119 U. S., 530:

> He (the patentee) is not at liberty now to insist upon a construction of his patent which will include what he was expressly required to abandon and disavow as a condition of the grant.

Again, in Royer *vs.* Coupe, 146 U. S., 524:

> It is well settled by numerous cases in this court, that a patentee cannot successfully contend that his patent shall be construed as if it still contained the claims which were so rejected and withdrawn.

See also:

Leggett *vs.* Avery, 101 U. S., 256.
Vulcanite Co. *vs.* Davis, 102 U. S., 222.
Fay *vs.* Cordesman, 109 U. S., 408.
Mahan *vs.* Harwood, 112 U. S., 624.
Shepard *vs.* Carigan, 116 U. S., 593.
White *vs.* Dunbar, 119 U. S., 47.
Bragg *vs.* Fitch, 121 U. S., 478.
Snow *vs.* Railway Co., 121 U. S., 617.
Crawford *vs.* Heisinger, 122 U. S., 589.
Phœnix Caster Co *vs.* Speigel, 133 U. S., 360.
Yale Lock Co. *vs.* Berkshire Nat. Bank, 135 U. S., 343.
Dobson *vs.* Lees. 137 U. S., 258,
National Hat Pouncing Mach. Co. *vs.* Belden, 147 U. S., 482.
Morgan Envelope Co. *vs.* Albany Co., 152 U. S., 425.

The Court of Appeals quite missed the point as to the bearing of the Jewell and Yawman 1886 shelf. They say (p. 311):

> Some of the inventions most relied on as anticipations of the invention claimed by the plaintiff will now be noticed.
>
> (1.) The Jewell and Yawman experiment of 1886 need not be described. In all the decisions made in the interference proceedings between defendant, as their assignee, and the plaintiff herein, that was found to be nothing more than an incomplete and abandoned experiment. There is no testimony to warrant us in coming to a different conclusion.

This 1886 shelf was not set up in this suit as an anticipation of the plaintiff's patent, but merely for the purpose of throwing light upon the proper construction to be given that patent by showing that the device which it embodies, though falling clearly within the Hoffman claims, as the plaintiff would now have them construed, was regarded by the Patent Office when the case was there as not embraced by such claims, and for that reason held not to be pertinent evidence. Had the Patent Office been persuaded that the 1886 shelf was within the interference issue, Hoffman might never have obtained his patent.

THE THIRD CLAIM OF THE HOFFMAN PATENT IN SUIT NEGATIVES ANY BROAD CONSTRUCTION OF CLAIMS 1 AND 2.

Through some inadvertence, Hoffman was granted the third claim of his patent. This claim is a broad one and apparently covers what plaintiff now insists the first and second claims cover. It reads as follows (p. 103):

> 3. In a roller shelf, a frame with a hand-hole at the front to permit the hand to pass back of the forward bar and with the forward supporting rollers at opposite sides of said hand-hole; substantially as described.

It will be observed that there is no limitation in this claim to any *carrying back* of the frame or to any *re-entrant bend* in the frame, but the language is broad enough to cover any frame having a hand-hole at the front formed to permit the hand to pass back of the forward bar.

But so clearly invalid is this claim, in view of the prior art, that plaintiff has not had the temerity to put it in issue in this cause. It has never been brought to the judgment of the court. If it had been, it would have been declared invalid. *So long, however, as it stands in the patent, it completely negatives any construction of the first and second claims that disregards the*

precise limitations expressed in these claims as to the carrying back of the front bar of the frame or the forming of a re-entrant bend in said front bar.

JUDGE LACOMBE HELD THE HOFFMAN PATENT TO BE EXCEEDINGLY NARROW.

In his opinion in the Chase suit (Fenton Metallic Mfg. Co. *vs.* Chase, 73 F. R., p. 831,) Judge Lacombe thus construed the Hoffman patent:

> The patent is No. 450,124, to Horace J. Hoffman, April 7, 1891, for improvements in storage cases for books. As stated in the patent, the object of the invention is "to facilitate the handling and prevent the abrasion and injury of heavy books, etc. It consists, essentially, of the peculiar arrangement of the guiding and supporting rollers and of the peculiarities in construction of the case and shelves hereinafter specifically set forth." It is unnecessary to discuss the details of the patent, or to enter into any elaborate disquisition on the state of the art. That may be more appropriately left for final hearing. Where the validity of a patent is attacked, and there is not a clear preponderence in its favor, injunction *pendente lite* should not issue. Not only has the complainant no clear case, but, on the contrary, it is difficult to see on what ground it can be seriously contended that there is patentable novelty warranting such a construction of the patent as would cover defendant's structure. Roller-shelf book cases were old. So, too, it was old to provide such shelves with a roller or rollers arranged in front of the edge of the shelf, so as to facilitate the insertion and removal of a heavy book without friction or abrasion. Stripped of all verbiage, the sole improvement of the patentee germane to the structures now before the court consisted in so arranging the front edge of the shelf as to provide a re-entrant bend or recess therein, so that the hand could be inserted a greater or less distance back from the line of the front edge, and the book seized hold of. The evidence shows, and certainly without any proof it is common knowledge, that so-called "hand-holes" in the front of book shelves have been used for very many

> years before the patent was applied for. It is true that these "hand-holes" or "re-entrant recessses" had been provided only in the old fashioned wooden shelves unprovided with rollers, * but when skeleton frame roller shelves had come into use it seems a rather startling prosposition to advance that it required inventive genius to provide them with the same sort of "hand-holes" to perform the same function. There might be some mechanical ingenuity warranting a patent for the details of the structure, but to hold defendant as an infringer the patent must be construed so broadly as to cover the recess or hand-hole generally, whether it be rounded or square, formed by a bending in of the front bar of the frame, or by protruding rollers on brackets to the right and left of the recess beyond the front bar.

There can be no doubt after reading this language that Judge Lacombe conceived the patent in suit to be limited, *if sustainable at all* (which even at that preliminary stage of the litigation he doubted), to a shelf just such as was illustrated in the patent, and to not cover a shelf with a straight front bar and brackets applied thereto to sustain the front rollers.

THE ALLEGED INFRINGING DEVICES.

Having now examined the Hoffman patent in the light of the prior art and of the proceedings in the Patent Office before its issuance, and having ascertained the narrowness of Hoffman's invention, if invention it was, and the limited and restricted character of claims 1 and 2 of the patent, we will briefly discuss the alleged infringing structures made by defendant.

For the convenience of the court we have had drawn on a separate sheet annexed to this brief views of the several devices that have been referred to as antedating the Hoffman invention, a view of the Hoffman shelf, a view of the shelf made by the defendant like "Office Specialty Mfg. Co.'s Catalogue, Figure

---

*The learned judge evidently was not apprised of the fact that wooden shelves with rollers, like the RichmondShelves, were also old in the art.

17," a view of the shelf made by defendant like "Exhibit Hansmann's Sketch," a view of defendant's New No. 4 Shelf, a view of "Jewell & Yawman's 1886 Shelf," which was held by the Patent Office not to be covered by the Hoffman claims, and a view of the shelf of the Jewell & Yawman patent owned be defendant and under which its New No. 4 Shelf is made.

DEFENDANT'S SHELF LIKE "OFFICE SPECIALTY MFG. CO.'S CATALOGUE, FIGURE 17."

The shelves made and sold by defendant like "Exhibit O. S. Mfg. Co.'s Catalogue, Fig. 17," were made precisely in accordance with the shelf illustrated in the Jewell & Yawman application which was in interference with the Hoffman application in the Patent Office (see Fig. 3, Drawing of Jewell & Yawman Application, opposite p. 135.) When the Hoffman patent was issued, shelves of this kind ceased to be manufactured by the defendant. The proofs show that only twenty-five (25) of these shelves were sold after the Hoffman patent issued. Whether, assuming it to have any validity at all, even when limited to Hoffman's precise structure, the Hoffman patent could be construed to cover defendant's shelves of this description, may well be questioned, but because of the fact that Jewell & Yawman, the defendant's assignees, had contended for priority of invention in respect of an issue calling for *an intermediate part of the frame carried back*, the court below being of opinion that the patent was valid, was constrained to give the plaintiff the benefit of any doubt as to this particular device of the defendant having such a carried back frame, and held it to be within the patent.

DEFENDANT'S SHELVES LIKE "EXHIBIT HANSMANN'S SKETCH."

After the decision in the interference case and the issuance of the Hoffman patent in suit, defendant ceased making shelves

like "O. S. Mfg. Co.'s Catalogue, Fig. 17," (p. 82) and began making shelves like "Exhibit Hansmann's Sketch" (p. 159). In these latter shelves, the front bar of the metal frame was made *straight* and the front rollers on opposite sides of the hand-hole were supported at their inner ends by individual brackets bolted to the front face of the straight bar of the frame and at their outer ends by extensions formed on the end bars of the frame. This construction was adopted both because it did not embody a supporting rack or shelf "having a re-entrant bend or recess in its front edge" nor "the intermediate part of the frame carried back," called for by claims 1 and 2 of the Hoffman patent, and because it was closely analogous to the form of roller shelf shown in "Jewell & Yawman's Exhibit 1886 Shelf, (Fig. 1, p. 126)," which the several tribunals of the Patent Office had decided did not fall within the Hoffman claims, since it had a *straight* front bar, instead of a front bar with a re-entrant bend or curve, and brackets for the front rollers applied to said *straight* bar.

It would seem, at first blush, that the difference between the shelves made in accordance with "Exhibit Hansmann's Sketch" and those made in accordance with "Exhibit O. S. Mfg. Co.'s Catalogue, Figure 17," was not very great and to consist merely of the cutting of the curved bar which supported the inner ends of the front rollers in the latter structure into two parts, but it must be remembered that in the shelves made in accordance with the illustration in the catalogue *the front bar itself, as well as the bar which supports the inner ends of the front rollers, was bent back* and that the difference between the device of the patent in suit and the device shown in the catalogue became thus increased and magnified in the shelves made like "Exhibit Hansmann's Sketch." The same reason therefore, for holding that the construction shown in the catalogue was within the claims of the patent in suit, *i. e.*, because such structure was the one directly involved in the Patent Office interference, did not obtain when considering the question of

infringement in connection with the shelves like Exhibit Hansmann's Sketch.

Our contention is, first, that a shelf like "Exhibit Hansmann's Sketch" should not be held to infringe the patent in suit because that identical form of shelf was not involved in the Patent Office interference; secondly, because said form of shelf does not have a re-entrant bend or curve in the front bar of its main frame; thirdly, because said form of shelf is of the type of the Jewell & Yawman Exhibit 1886 Shelf, decided by the different tribunals of the Patent Office in the interference case to not fall within the issue of the interference or the Hoffman claims; and fourthly, because such form of shelf was held by Judge Lacombe not to be within the patent. Judge Lacombe said (page 832, 73 F. R.):

> There might be some mechanical ingenuity warranting in a patent for the details of the structure, but to hold defendant as an infringer the patent must be construed so broadly as to cover the recess or hand-hole generally, whether it be rounded or square, formed by a bending-in of the front bar of the frame, or by protruding rollers on brackets to the right and left of the recess beyond the front bar.

The learned judge refused to give such a construction to the patent.

DEFENDANT'S NEW NO. 4 SHELF.

After the interlocutory decree in this cause enjoining defendant specifically from making shelves like "Exhibit O. S. Mfg. Co.'s Catalogue, Fig. 17" and "Exhibit Hansmann's Sketch," defendant began the manufacture of what is known as the "New No. 4 Shelf" (bottom figure opp. p. 233). This shelf Judge Cox held was not properly before the court and ruled out all findings of the Auditor in respect thereto (p. 299), but he, in turn, was reversed by the Court of Appeals, and the finding of the Auditor approved. (p. 318).

In this New No. 4 Shelf the *front bar* of the frame is made

perfectly straight and each of the rollers is supported *at both its ends* in a separate bracket or hanger, which is, in turn, bolted to the aforesaid front flat bar of the frame. There is no curving back of the frame, there is no re-entrant bend in the frame. There is, it is true, a space on hand-hole between the front rollers, but such a space is not claimed broadly in claim 1 or 2 of the patent in suit, nor could it rightfully have been made the subject of a claim by Hoffman, in view of the prior Adams patent, or of the prior Richmond shelf.

The New No 4 Shelf is clearly like the Jewell & Yawman 1886 shelf (p. 126, Fig. 1) held by all the tribunals of the Patent Office not to be within the Hoffman claims in suit, and is therefore such a structure as the Patent Office intended should *not* be covered by said claims.

THE GRANTING OF THE JEWELL & YAWMAN PATENT NO. 557,392, UNDER WHICH DEFENDANT MAKES THE NEW NO. 4 SHELF, SUPPORTS DEFENDANT'S CLAIM OF NON-INFRINGEMENT.

Since the grant of the Hoffman patent in suit a patent has been granted to the defendant, as the assignee of Jewell & Yawman, covering defendant's New No. 4 Shelf. This patent is No. 557,392 and is dated March 31, 1896 (p. 157).

Now, it has many times been decided that where the patentee of a mere improvement in an art sues the user of another patented improvement, the circumstance that the defendant has a patent for his structure tends to prove lack of identity of structure and to negative the charge of infringement. This is a reasonable doctrine and is founded upon the assumption that if the defendant's device had been considered the same as, or an equivalent for, the device of the plaintiff, the defendant's patent would not have been granted. In other words, the grant to defendant is evidence of a substantial difference between his device and that of the plaintiff.

In Boyd *vs.* Janesville Hay Tool Co., 158 U. S., 260, the Supreme Court of the United States, quoting from an earlier opinion of Mr. Justice Strong, on the circuit, said:

> The grant of the letters patent (to the defendant) was virtually a decision of the Patent Office that there is a substantial difference between the inventions. It raises the presumption that, according to the claims of the later patent, this invention is not an infringement of the earlier patent.

See also—

Corning *vs.* Burden, 16 How. 265.

HOFFMAN HAVING INVENTED BUT A SPECIFIC IMPROVEMENT, IF HE INVENTED ANYTHING AT ALL, CANNOT INVOKE THE DOCTRINE OF EQUIVALENTS.

Hoffman's invention, as we have seen, was at the very most a mere specific improvement over pre-existing roller shelves. He did not originate the idea of roller shelves, nor of roller shelves with hand-holes. If he invented anything, which Judge Lacombe seriously doubts and Judge Wheeler denies, it was the *specific form* of his particular shelf.

Being then a mere improver, he is not (nor is his assignee), under the authorities, entitled to invoke the doctrine of equivalents, but must be restricted to his own peculiar structure.

McCormick *vs.* Talcott, 20 How , 305.
Burr *vs.* Duryea, 1 Wall., 531.
Bragg *vs.* Fitch, 121 U. S., 478.

Upon the foregoing showing, we submit that the bill in this cause should be dismissed, on the ground, if for no other reason, that neither of the defendant's shelves embodies the subject matter of claims 1 or 2 of the patent in suit construed limitedly as the latter must be to be sustainable if they are sustainable at all.

THE AUDITOR'S REPORT.

The Auditor found that the plaintiff had suffered no damages by reason of defendant's infringements, and as the plaintiff took no exceptions to this finding further consideration of the question of damages is unnecessary.

At the request of the defendant, the Auditor made separate findings in respect to the profits made by the defendant from the sale of the several kinds of shelves it manufactured. The number of findings required by following such a course accounts for the multiplication of exceptions.

The Auditor found that claims 1 and 2 of the patent in suit are for a roller shelf; that the defendant is not a manufacturer but buys its goods already made; that in some instances shelves alone, as separate articles have been made for defendant and have been sold by defendant without association with other devices or structures; that in the majority of instances, however, the shelves made for and furnished to the defendant have been purchased in connection with cases adapted to contain and support them; that in the majority of instances the shelves sold by defendant have been sold in association or in combination with cases; that where shelves associated with cases have been purchased by the defendant, the defendant is entitled to a deduction for the cost of the cases; that where shelves have been sold by the defendant in association with cases the defendant is entitled to a deduction from the price received equal to the value of the cases. The Auditor further found that as the purchase and sale of roller shelves forms but a fractional part of defendant's whole business, the defendant is entitled to an allowance for a proportionate part of the general expenses of the business in arriving at the net profits realized from the sale of the shelves.

The defendant's exceptions to the Auditor's report do not question the number of shelves of different styles purchased by defendant or the number sold by defendant, nor do they ques-

tion the amount of deduction (50 per cent.) from the *selling price* of combined shelves and cases *due to the cases* constituting parts of such combinations; but they do question the propriety of the Auditor's findings as to the prices paid by defendant for the shelves as such and as to the prices received from the sale of the shelves as such.

THE EXCEPTIONS TO THE AUDITOR'S REPORT.

The defendant's exceptions to the Auditor's report will now be separately examined.

FIRST EXCEPTION.

> *First Exception.*—For that the said Auditor in his said report found that the shelves of the form and description illustrated in "Exhibit O. S. Mfg. Co.'s Catalogue, Fig. 17," and of the form and description illustrated in "Exhibit Hansmann's Sketch," were sold by the defendant at an average price of $2.27 per shelf in combination with cases, whereas he should have found that he was unable to ascertain what was the average selling price of said shelves in combination with cases and that there was no competent evidence from which to determine such average selling price.

The error pointed out by this exception is the Auditor's assumption that the average selling price of the shelves in combination with cases was $2.27 per shelf and case. He rejects as unreliable the estimates of defendant's General Manager contained in the statement of September 15, 1893 (p. 234), and bases his finding entirely upon the schedule of prices contained on page 228. If defendant had adopted a regular schedule price and had adhered to the same in selling its goods, the Auditor might, perhaps, have been justified in taking such schedule price as a basis for his computation; but the evidence is that this schedule was one that was furnished to defendant's agents and salesmen as a mere general guide and was not by any means strictly followed.

All the testimony on the subject of the schedule prices comes from Mr. Lomb, General Manager of defendant corporation. He testifies as follows (p. 176):

> Q. Did you not furnish your agents and managers with a standard schedule or list prices at which certain goods would be sold under ordinary circumstances, so that if a party wrote to one of your managers and asked the price of your 21-inch No. 4 Shelves he would have a standard from which to give his answer?
>
> A. We have such schedule *but the price at which the goods were to be sold was left to the discretion of the agents or managers.*
>
> Q Was that a printed or written schedule furnished each agent?
>
> A. It was typewritten.
>
> I want to get your own estimate as to the price at which the shelves should be sold, and this is what I referred to when I asked you to produce that schedule, you will, therefore, understand now what it is that I want to be produced here.

Page 179, by Mr. Foster:

> Q. You referred to the fact that while you had a normal price for certain articles your agents were instructed that they might sell at lower prices under certain circumstances, I understand that these circumstances arose from competition, and they were instructed that if they had to enter into competition with other parties that they might offer the goods at lower prices for the sake of effecting the sale, was that so?
>
> A. Yes, sir; but at the same time we have many instances where we do not have competition and rather than create a competition or make the would-be purchaser write for other estimates, *the job would be closed at 10 or 15 per cent. lower rather than to get that competition in.*

Page 180:

> You have heretofore been requested to produce a schedule of prices such as you furnished your agents with for the purpose of guiding them as to the prices to be asked for shelves of the character to which you have

testified. If you have said schedule, produce the same and mark it with your initials.

A. I here produce schedule of prices of roller shelves marked with my initials. Prices include the cases. Proportion of shelves which we sell without cases as compared with those we sell with cases is as 9 to 110.

(Schedule thus produced is offered and put in evidence and marked "Exhibit Defendant's Schedule of Shelf Prices."

Page 181:

You have stated that your agents were instructed that they might sell at lower than the schedule prices and you have produced memoranda showing the number of shelves disposed of to the agents and the amounts charged them. Please state the percentage of reduction below the schedule price, or the prices mentioned in the memoranda, that was actually made in settling with your agents, so far as you can with certainty fix it. This is, assuming the total amount charged to your agents in the said memoranda to have been so much, and the total amount paid by your agents in settlement of accounts to have been so much, what would have been the percentage of difference between the two accounts so far as you are able to determine it?

A. As goods are mostly sold in competition and many times at considerable reduction, it is impossible to state with any degree of certainty the price received for them. Shelves are in almost every case furnished with other work.

On page 181 appears the "Exhibit Defendant's Schedule of Shelf prices" introduced after the quoted answer, p 180. It reads as follows:

SCHEDULE OF PRICES OF ROLLER SHELVES IN CASES.

(Either straight or divided front roller).

20x4½ x14 in. or less in width or depth	$2.20	$2.40
24x4½ x16 in. " " "	2.50	2.65
30x5 x20 in. " " "	3.00	3.25
Over 30 in. wide, in quanties of 20 or less	5.00	5.50

Page 228:

State the regular price at which you sell and have sold shelves of different sizes alone and apart from cases.

A. I submit herewith schedule of prices of shelves with and without cases, which we adopted about a year ago for a guidance of our salesman, *but it is not always adhered to in actual practice.*

Schedule submitted in connection with the above answer reads as follows:

ROLLER BOOK SHELVES—with Cases—

20 in. wide x 14 in. deep or less	$2.25
20 in. " x 17 in. " " "	2.35
20 in. " x 20 in. " " "	2.50
20 in. " x 24 in. " " "	2.60
24 in. " x 17 in. " " "	2.50
24 in. " x 20 in. " " "	2.60
24 in. " x 24 in. " " "	2.75
24 in. " x 30 in. " " "	3.00
30 in. " x 17 in. " " "	3.00
30 in. " x 20 in. " " "	3.25
30 in. " x 24 in. " " "	3.50
30 in. " x 24 in. " " "	3.75
30 in. to 40 in. wide, without regard to depth,	4.75
Over 40 in. wide	6.00

ROLLER BOOK SHELVES—without Cases—deduct 40 per cent.

The above is substantially all the evidence relating to the schedule prices from which the Auditor deduces an average selling price of $2.27 per shelf in combination with cases.

By just what process he arrives at this conclusion we are not informed. He certainly must have done a good deal of guessing to arrive at such a result. Not only does he guess as to the figures, but he assumes that either of the schedules produced was in operation during the whole period of the account-

ing, that is to say, between the time of bringing the suit in 1893 to September 1, 1896.

In order that a plaintiff may recover profits of a defendant, in a patent case, it is necessary that he show the *actual profits* that the defendant made, not the profits that he might have made or should have made, but the profits that he actually did make, and this must be established by certain and explicit evidence. Speculation and conjecture are not to be indulged in.

Tilghman *vs.* Proctor, 125 U. S. 136.
Garretson *vs.* Clark, 111 U. S. 120.

The proofs clearly show that the so-called schedule price was not adhered to—was only a general guide. Even the Auditor recognizes this, for he holds, in effect, that if there was any departure from the schedule price it was the duty of the defendant to show it; that the burden of proof is upon the defendant. This is not the law. The burden of proof in the ascertainment of both damages and profits in a patent case is upon the plaintiff.

Keystone Mfg. Co. *vs.* Adams, 151 U. S., 139.
Seymour *vs.* McCormick, 16 How., 480.

The Auditor evolves a schedule price which the proofs show was not followed and then places the burden of proof upon the defendant to show the instances in which it was not followed. What the Auditor should have done was to require the plaintiff to prove what the defendant actually got for each shelf sold. The names of the purchasers were given and had the plaintiff taken the trouble to follow them up it could have been ascertained what each purchaser actually paid. The burden was upon the plaintiff.

The exception should have been allowed on the ground that the Auditor reached his conclusion about the average selling price by a series of guesses and assumptions not justified by the evidence.

SECOND EXCEPTION.

Second Exception.—For that the said Auditor in his said report found that the average cost to the defendant of the manufacture of shelves of the form and description illustrated in "Exhibit O. S. Mfg. Co.'s Catalogue. Fig. 17," and of the form and description illustrated in "Exhibit Hansmann Sketch" in combination with cases, was 99 cents per shelf, whereas he should have found that he was unable to find from the evidence what such cost of manufacture was.

There is no basis in the evidence for the Auditor's assumption that the average cost of shelves in cases was 99 cents per shelf with case. The Auditor made a palpable mistake. He assumed that the entire number of shelves purchased in cases was 46,623 and he found that the aggregate cost of the entire number of shelves was $46,138.88. This cost price he divided by the total number of shelves, with the result of showing an average cost price of 99 cents per shelf and case. The error in his finding consists in the assumption that there were 46,623 *combined shelves and cases* purchased, whereas the proofs show that this number 46,623 includes 2,206 shelves that were purchased without cases. (See Defendant's exhibit "Exhibit Shelves Without Cases" (p. 279) and defendant's statement of November 20, 1890, (p. 233) To find the average cost of shelves in cases, or, more properly, of the combined cases and shelves, it is manifestly necessary that the shelves that were purchased without cases should be left out of the computation. The Auditor's error is an error in favor of the defendant. but is nevertheless an error, shows imperfect calculation and the exception should have been allowed.

THIRD EXCEPTION.

Third Exception.—For that the said Auditor in his said report found that the estimated average cost price to defendant of the shelves alone was 49½ cents per shelf (the same being one-half of the estimated average

cost of shelf and case together); whereas in view of the certain and explicit evidence afforded by "Exhibit Shelves Without Cases" (p. 269) and defendant's statement of Nov. 20, 1896 (p. 233), showing that the lowest actual cost price to the defendant of any shelf without a case was 70 cents per shelf and the average cost price of 2,206 shelves without cases was a fraction over 87 cents per shelf, he should have found that the average cost price to defendant of a shelf alone was not less than 87 cents and a fraction.

The error pointed out by this exception is partly due to the adoption by the Auditor of the results of his false calculation noted in the second exception and partly due to other conditions. The Auditor assumed that the average cost price of the combined shelves and cases was 99 cents, and in order to arrive at the cost of the shelves alone, as separate articles, he divided the 99 cents by 2, intending thereby to apportion the cost of the combined shelf and case, one-half or 49½ cents to the shelf and the other half to the case. In discussing the second exception we have pointed out his mistake in assuming that 99 cents was the average cost of a combined shelf and case. His error in assuming the cost price of the shelf alone to have been one-half of 99 cents or 49½ cents is palpable. The allowance of one-half for the case was arrived at by pure speculation and guess work, and the attributing of one-half only of the cost of the combined shelf and case to the shelf is contrary to the most positive and convincing evidence afforded by the record. The cost of shelves alone, which was the ultimate item the Auditor had to deal with, is shown conclusively by the evidence concerning the cost of the 2,206 separate shelves purchased without cases, afforded by "Exhibit Shelves Without Cases," referred to in defendant's statement of November 20, 1896 (p. 233), and verified by the Yawman & Erbe bills, in evidence. A careful examination of "Exhibit Shelves Without Cases" (p. 279) will show that the lowest actual cost price of any shelf *without a case* was 70 cents, and that the average

cost price of the 2,206 separate shelves, without cases, was a fraction over 87 cents per shelf. The Auditor should, therefore, have found that the average cost price to defendant of a shelf alone was not less than 87 cents and a fraction, instead of finding that such average cost per shelf was 49½ cents.

The error pointed out by this exception shows how wise and salutary the rule is that requires a plaintiff to show the defendant's profits by positive and explicit direct evidence and excludes him from resorting to speculation, conjecture and guess work. For the reasons stated, this exception should have been allowed.

FOURTH EXCEPTION.

> *Fourth Exception.*—For that the said Auditor in his said report found that the New No. 4 Roller Shelf is substantially the same in form and description as the shelf illustrated in "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," and in "Exhibit Hansmann's Sketch," and an infringement of claims 1 and 2 of the Hoffman patent in suit; whereas he should have found that said New No. 4 Roller Shelf was substantially different from said above-mentioned exhibit shelves and not an infringement of said claims 1 and 2 of the Hoffman patent in suit.

This exception is directed to the Auditor's finding that the New No. 4 Shelf was an infringement of claims 1 and 2 of the patent in suit, and his error in this respect is pointed out in the preceding pages of this brief where the question of infringement is discussed. Judge Cox refused to consider the question of infringement of the New No. 4 Shelf (p. 299), and the Court of Appeals overruled him.

FIFTH EXCEPTION.

> *Fifth Exception.*—For that the said Auditor in his said report found that the average gross proceeds of the sales attributable to the shelves separately from cases is $1.135

per shelf; whereas he should have found that he was unable to ascertain from the evidence the average gross proceeds.

The error pointed out by this exception is explained in treating hereinabove the first exception.

SIXTH EXCEPTION.

Sixth Exception.—For that the said Auditor in his said report found that the average cost of manufacture of said shelves separate from cases is .495 per shelf; whereas he should have found from the evidence afforded by "Exhibit Shelves Without Cases" and defendant's statement of November 20, 1896 (p. 233), that the average cost of manufacture of said shelves, separate from cases, was not less than 87 cents and a fraction per shelf.

The error pointed out by this exception is discussed in our treatment of the third exception.

SEVENTH EXCEPTION.

Seventh Exception.—For that the said Auditor in his said report found the net profits realized by the defendant from the sale of the 25 shelves like "Exhibit Office Specialty Mfg. Co.'s Catalogue, Fig. 17," to September 1, 1896, to be $5.125 as shown in Schedule B; whereas he should have found that defendant had realized no profits from the sale of said shelves.

The erroneous calculation referred to in this exception is the result of the errors of computation pointed out in considering the first, second and third exceptions.

EIGHTH EXCEPTION.

Eighth Exception.—For that the said Auditor in his said report found the net profits realized by the defendant from the sale of the shelves described in "Exhibit

Hansmann's Sketch " to be $5,775.05 as shown in Schedule B. whereas he should have found that defendant had realized no profits from the sale of said shelves.

The erroneous calculation of the Auditor pointed out in this exception results from the errors considered in treating the first, second and third exceptions.

NINTH EXCEPTION.

Ninth Exception.—For that the said Auditor in his said report found the net profits realized by the defendant from the sale of the shelves designated as New No. 4 Roller Shelf to September 1, 1896, to be $4,777.53 as shown in Schedule D; whereas he should have found that defendant had realized no profits from the sale of said shelves.

The erroneous calculation of the Auditor pointed out by this exception results from the errors pointed out in treating the first, second and third exceptions.

TENTH EXCEPTION.

Tenth Exception.—For that the said Auditor in his said report refused to consider the testimony of Alexander S. Steuart, an expert witness, called by defendant on the question of the infringement of the New No. 4 Shelf; whereas he should have considered and given due weight to said testimony on said question.

There was manifest error on the part of the Auditor in excluding from consideration the testimony of Mr. Steuart, who was called to explain the plaintiff's patent and the New No. 4 Shelf on the issue of new infringement raised for the first time before the Auditor. Such testimony was as manifestly competent before the Auditor as it would have been before the court on such an issue.

ELEVENTH EXCEPTION.

Eleventh Exception.—For that the said Auditor in his said report refused to consider the testimony of the said Alexander S. Steuart respecting the prior state of the art in relation to claims 1 and 2 of the Hoffman patent in suit and the bearing of said claims on the alleged infringing New No. 4 Shelves; whereas said Auditor should have considered and duly weighed said testimony on said question.

Evidence as to the pior state of the art is always admissible as an aid in the proper construction of a patent whenever that question of construction arises.

Brown *vs.* Piper, 91 U. S. 37.
Grier *vs.* Wilt, 120 U. S. 412.
Robinson on Patents, Vol. 3, par. 1020.

The new issue of infringement raised by the presentation of the matter of the alleged infringement of the New No. 4 Shelf to the Auditor required the Auditor, in the absence of any opinion of the court construing the patent, to himself give a construction to the patent in order to decide the question of infringement. The evidence of Mr. Steuart was, therefore, relevant to such an issue and should have been given due consideration

TWELFTH EXCEPTION.

Twelfth Exception.—For that the said Auditor in his said report has awarded plaintiff profits alleged to have been realized by the defendant, notwithstanding it appears from the bill of complaint and evidence offered by the plaintiff that the plaintiff manufactures under the Hoffman patent in suit, and neither the bill nor the evidence discloses that the plaintiff has marked its articles made under said patent with the word "patented" together with the day and year the patent was granted, nor that the defendant was duly notified of its infringement and continued after such notice, to make, use or vend the article so patented; whereas he should have refused to award any profits or damages because of the inhibition of Sec. 4900 Revised Statutes.

Sec. 4900 R. S. U. S. reads as follows:

> SEC. 4900. It shall be the duty of all patentees, and their assigns and legal representatives, and of all persons making or vending any patented article for or under them, to give sufficient notice to the public that the same is patented, either by fixing thereon the word "patented," together with the day and year the patent was granted, or when from the character of the article, this cannot be done, by fixing to it, or to the package wherein one or more of them is inclosed, a label containing the like notice; and in any suit for infringement, by the party failing so to mark, *no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the articles so patented.*

This section of the statute makes it a *sine qua non* that the plaintiff suing for the infringement of a patent must, as a condition precedent to a recovery, show that he has either marked his goods in accordance with this statute or else must prove "that the defendant was duly notified of the infringement and continued after such notice to make, use, or vend the article so patented."

The bill in this case makes no allegation respecting either marking or notice, and the proofs fail to show either marking or notice. Under the authorities, there can be no recovery.

> Dunlop *vs.* Schofied, 152 U. S. 259.
> Traver *vs.* Brown, 69 O. G. 1071.
> Blount *vs.* Bardsley, 66 F. R. 761.
> Allen *vs.* Deacon, 21 F. R. 122.

In National Co. *vs.* Belcher, 68 F. R. 665, Judge Dallas, Circuit Judge, said:

> Upon the authority of Dunlop *vs.* Schofield, 152 U. S. 244, 14 Sup. Ct. 576, I sustain the point made for respondents that "there can be no recovery for damages and no accounting for profits because the plaintiff has failed to allege in the bill of complaint either that the patented devices were marked 'patented' or that actual

notice of that fact was given to the defendants, as required by Section 4900, Revised Statutes." In Allen *vs.* Deacon, 21 F. R. 122, it was held in a suit in equity that in the absence of marking or notice, neither damages or profits can be recovered.

In conclusion it is contended by defendant:—

First, that the plaintiff's patent is invalid and void for want of patentable invention in the subject-matter.

Secondly, that if said patent can be sustained at all, it must be held to be limited to the precise structure shown and described in it, and as defendant has not made, used or sold such a structure, it has not infringed.

Thirdly, that the defendant has not been shown by any evidence which the law regards as sufficient to have made any profit to which the plaintiff is entitled.

Fourthly, that as the plaintiff is shown to be a manufacturer under the patent in suit and has not shown either that it marked its patented article with the word "patented," or gave the defendant notice of infringement, there can be no recovery in view of Sec. 4900 Revised Statutes.

Fifthly, that the decree of the Court of Appeals of the District of Columbia should be reversed, with instructions to direct the Supreme Court of the District of Columbia to dismiss the plaintiff's bill, with costs.

MELVILLE CHURCH,
JOSEPH B. CHURCH,
Solicitors and of Counsel for Appellants.

March 21, 1899.

No. 253.

Brief of Foster for Appellee

Filed April 13, 1899.

Office Supreme Court U. S.
FILED
APR 13 1899
JAMES H. McKENNEY,
Clerk.

Supreme Court of the United States.

October Term, 1898.

No. 253.

OFFICE SPECIALTY MANUFACTURING COMPANY,
Appellant,

vs.

FENTON METALLIC MANUFACTURING COMPANY,
Appellee.

APPEAL FROM THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

BRIEF FOR THE APPELLEE.

CHARLES ELWOOD FOSTER,
Solicitor and of Counsel for Appellee.

McGILL & WALLACE, LAW PRINTERS, Washington, D. C.

REFERENCE INDEX TO TRANSCRIPT.

Testimony in Suit.

	Page.
PLAINTIFFS—	
Freeman	10–30
Hine	31–36
REBUTTAL—	
Hine	36–42
Freeman	42–48
Lawlor	48, 49
Burroughs	49, 50
DEFENDANTS—	
Jewell	50–70
Dudley	70–72
Dodge	72–77
Jewell	78, 79
Birckhead	80, 81

Testimony. On Accounting.

PLAINTIFFS—	
Statement of defendant company	234
Lomb	161
Hine	184–196
Hine (recalled)	219
Hine (statement)	229, 230
DEFENDANTS—	
Lomb	196–200
Stewart	201–218
Lomb (statement)	228, 229
Lomb (statement with schedules)	232, 233

Application Files and Contents.

Hoffman file and contents patent No. 450,124 in interference	83–100
Jewell & Yawman file and contents serial No. 290,122 in interference	128–138
Jewell & Yawman file and contents patent No. 557,392	110

Letters Patent.

Hoffman patent No. 450,124 101–103
Jewell & Yawman patent No. 557,392 156–158
Harris 143, 144
Boone 145, 146
Wolfe 146–149
Conant 148–150
Adams 151–153
Hoffman No. 437,833 (a division of original application) 154–156

List of Exhibits. Introduced on Accounting.

New No. 4 shelf 170
Fig. 17, O. S. Co. Catalogue ..... opposite page 82
Drawing Exhibit A illustrating Fig. 17, Old No. 4 Shelf opposite page 233
Drawing Exhibit B illustrating Exhibit Hansmann opposite page 233
Drawing Exhibit C illustrating New No. Shelf ... opposite page 233
Exhibit Defendant's Schedule of Shelf Prices 181
List of Roller Shelves sold—September 12, 1893, to December 31, 1894—Memorandum No. 1 181–183
Memorandum No. 3
Memorandum No. 2 } 196
Memorandum No. 4
Exhibit Hine's Statement 227, 228
Defendant's Schedule Exhibit Roller Book Shelves With Cases; with deduction of 40 per cent for cases 228
Schedule Shelves in Cases 238–279
Schedule Shelves Without Cases 279–282
Exhibit Hine's Drawing ..... opposite page 282

Exhibits on Accounting—Where Introduced.

Memorandum No. 1 166
Memorandums No. 2, 3, 4 171–196
Yawman & Erbe Bills 175–181
Schedule Shelves in Cases 181
Jewell & Yawman Patent No. 557,392 200
Jewell & Yawman patent—file and contents 230
File and contents Hoffman Patent No. 450,124 201
Shelves in Cases 233
Shelves Without Cases 233
Exhibit Hine Drawing 187

Decisions, Decrees and Orders—Where Introduced.

Decision of Interference Examiner	103
Decision of Board	106
Decision of Commissioner	109
Decree ordering accounting	159
Auditor's order for accounting	160
Auditor's order for accounting	231
Auditor's report	283–296
Defendant's exceptions to Auditor's report	296–298
Decision of Judge Cox	299
Decree on final hearing	300
Defendant's assignment of errors on appeal to Court of Appeals	301–303
Decision of Court of Appeals and decree	308–318
Defendant's assignment of errors on appeal to the Supreme Court of the United States	321–324

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1898.

OFFICE SPECIALTY MANUFACTURING COMPANY, Appellant,

vs.

FENTON METALLIC MANUFACTURING COMPANY, Appellee.

No. 253

APPEAL FROM THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

Statement of the Case.

The Fenton Metallic Manufacturing Company, of New York, as assignees under letters patent to Horace J. Hoffman, dated April 7, 1891, for Improvements in Storage Cases, brought suit in the District of Columbia against the Office Specialty Manufacturing Company, of New York, and its agent, Charles E. Birckhead, of Washington, D. C., for infringement of said letters patent by the manufacture of certain metallic roller shelves.

The defendant, The Office Specialty Manufacturing Company, was the assignee through mesne assignments of Jewell & Yawman, whose application for a patent filed November 6, 1888, was in interference in the United States Patent Office with the application of said Hoffman filed February 12, 1887; and the interference proceedings on behalf of Jewell & Yawman were conducted by the parties who subsequently formed the Office Specialty Manufacturing Company. (Rec., pp. 32, 33, fols. 53, 54.)

The Examiner of Interferences, the Board of Examiners-in-Chief, and the Commissioner of Patents successively decided in favor of Hoffman, to whose assignees the letters patent then issued.

During the pendency of the interference, the Hoffman application was divided (as permitted by the rules of the Patent Office) to secure a patent for the features not involved in the interference; and this patent issued as letters patent No. 437,833. (Rec., pp. 153–156.)

The Office Specialty Manufacturing Company having put on sale shelves of the character shown in figure 17 of the Exhibit Office Specialty Company Catalogue (Rec., p. 82) and in Exhibit Hansmann Sketch (Rec., p. 159), suit was duly brought by the Fenton Metallic Manufacing Company, against the said Office Specialty Manufacturing Company and its agent Birckhead. (Subsequently, by stipulation, the co-defendant Birckhead was dismissed from the suit.)

Upon pleadings in due form and evidence taken for

final hearing, the case came up for argument and was duly argued, and upon June 3, 1893, a decree was entered (Rec., p. 158) adjudging the patent to be valid, and the first and second claims thereof to be infringed by the using and vending by defendants of shelves, and cases containing shelves, made as illustrated in the before named exhibits; and the cause was sent to the Auditor to determine and report the profits and damages resulting from the infringement.

Subsequently application to the court was made by defendants for leave to file a supplemental bill to set up alleged new defenses. This was refused (68 *Official Gazette* 1390) and the decision was not appealed from.

After the proceedings before the Auditor were begun, it was discovered that the defendant was making a modified form of shelf (termed the "New Number 4" shelf), and after a full hearing of both sides, the Auditor held that the differences between such new shelf and those referred to in the decision and order of the court were merely colorable, and therefore (but in separate statements) included in his accounting the different forms as infringing devices. The cause coming up for hearing upon this report and exceptions, and upon the whole case on its merits, the court (Rec.,p. 299) referring to the decision of Chief Justice Bingham, said:

> "I see no reason to differ with him after such examination as I have been able to give the case."

The court, however, construed the reference to the

Auditor to have included only the actual constructions referred to in the order of the court, and by order, dated April 5, 1897, sustained defendant's exceptions 4 and 9, and overruled the defendant's twelfth exception as setting up a defense not made in the pleadings, and, except as above set forth, affirmed the Auditor's report; upon which a final decree was entered, confirming and making final the decree of June 3, 1893, and the order of April 5, 1897, and adjudging that the defendant pay to the plaintiff the sum of $5,780.17, with interest and costs.

From this decree both parties appealed, and the Court of Appeals (Rec., pp. 308–318), deciding on all points for the plaintiff, made a decree affirming so much of the decree of the court below as had been appealed from by the defendant, and reversing so much as was appealed from by the complainant, the defendant to pay costs on both appeals.

The defendant below (appellant now on appeal to this court) asks a complete reversal of all the findings of all the tribunals which have acted in this case.

The Patented Invention.

This is a shelf. It has two peculiar features—

1. The *frame;*

2. The arrangement of the *rolls.*

The **frame** is metallic; open, for the circulation of air and escape of dust; rigid, to constitute an effective

support for the book and to brace the light metallic case in which it is bolted, having bearings back of the front portion for supporting a series of rolls, with two separate pairs of bearings forward of the front portion, and with a recess between these separate bearings. *No such frame was ever known or constructed before Hoffman invented it.*

The **rolls** are in two sections. Those of the back section are arranged to support the body of the book and avoid friction in insertion and removal. The front section consists of two rolls. These, as shown in the patent drawing, are arranged outside the front part of the frame, support the book at the back, and prevent wounding the binding in putting the book on and taking it off the shelf. They are also separated opposite the central recess of the frame so that the hands or fingers, which grasp the book, can get *back of the rolls* to pull it out or to hold it in putting it in. As the hand can be thus applied no space need be left to hook the fingers into the ends of the back binding. *No such roll arrangement was ever before devised.*

Further, no prior shelf ever had front rolls supporting the book when at rest, and yet *permitting the hand to pass back of them.* It is the shelf, as an article complete in itself, that is claimed; not merely a roller-shelf with a hand hole, as contended by defendant, but a metallic shelf with an open rigid frame and bearings, and with rollers; and both frame and rollers so constructed and arranged as to secure the advantages of a rigid frame and of a roller support. Such a shelf supplied a want never before filled.

The Utility of the Hoffman Invention.

Prior to the invention of the patentee, Hoffman, the only roller shelves adapted for supporting large books, of from twenty-five to thirty-five pounds and upward, such as are used in tax offices and elsewhere, consisted of parallel rolls the length of the shelf, sometimes of wood and sometimes of metal; and only in the latter case were they mounted in frames.

These proved to be very inefficient. Where the rollers were of wood they would warp and sag, and instead of rotating, would injure the binding of the books. They were large, and occupied valuable space. When metal rolls with frames were used, the rolls extended the length of the frame, which could not be provided with cross braces, so that the frames were weak and did not brace the cases in which they were inserted; the length of the rolls permitted them to sag under the weight of the books unless they were made unduly thick and occupied an objectionable amount of space. In all cases where there was a roller at the front, which was essential in order to protect the binding of the book both in putting it on and taking it off of the shelf, the latter had to be made narrower or less in depth than the book so that the back of the book would project beyond the rollers, and would therefore not be supported, tending to expand and injure the binding, or else, if the shelf was made wide enough to support the entire book, the fingers would be injured in placing the book *upon* the shelf, while it was necessary in removing the book

from the shelf to catch the edges of the binding at the back with the fingers and draw out the book, thus injuring the binding.

There is practically no question as to the remedy of all these defects by the construction finally invented by Hoffman; and the evidence upon both sides is to the effect that the Hoffman construction superseded whatever had gone before it.

As early as November 6, 1888, attorney for Jewell & Yawman writes to the Patent Office (Rec., p. 132)—

> "The device on which applicant seeks a patent is now extensively manufactured, and its rapid adoption would seem to be a strong evidence of the fact that it supplies a demand not answered by other devices known in the art."

Hine says (Rec., p. 32):

> "At once upon offering these shelves to the public they met with favor, and in a little while quite an extensive demand arose for the said shelves, which demand has increased from time to time until this time (April, 1892) they are sold in very large quantities. Since the time when the said shelves were first offered to the public to the present day at least 60,000 have been put into use. The actual number used is probably much larger, but I am not aware at the present time of the number of such shelves that have been made and put into operation by unauthorized parties. In consequence of the excellence of this character of shelf, they rapidly displace other forms of metallic shelving, so that to my knowledge there are very few other forms being at present manufactured and used."

The persistency with which defendant fought the case in the Patent Office from 1887 to 1891, contending for

the patentability of the shelf, and that Jewell & Yawman were the first inventors, and the equal persistency with which defendant has contended from 1891 up to the present time that the invention is not patentable and is open to the public, is of itself evidence that the Hoffman shelf is an essential structure in the manufacture of metallic shelving, and that it contains elements which are not to be found in prior structures which the public is free to use.

Without referring here in detail to the expert and other evidence in the case, it is sufficient to point out that the Hoffman shelf is the first shelf in which there is a rigid metallic frame that will aid in imparting rigidity to the thin metallic casing to which it is bolted, open for the circulation of air and escape of dust, with two series of bearings, one throughout the main body of the shelf for the main body of rollers which support the book, except at the front, and the other consisting of two separated pairs of bearings with an intermediate space. It is the first in which the rollers are in two sections, the main body of rollers supporting the main body of the book, while the other section consists of two rollers arranged at the front, but separated from each other. By this arrangement of rolls, the book is supported at all points in front as well as throughout the remaining portion, and the shelf can be made as wide as the book, so as to thoroughly support it and not interfere with the circulation of air or escape of dust, while the hand can pass back of the front rollers without injury thereby, and can also grasp the book when it is shoved back upon the shelf.

The Hoffman shelf is the only shelf that can be employed with books filling completely the book spaces, thus saving a large percentage of space otherwise wasted. Mr. Hine was asked (Rec., p. 186): "What would be the relative loss of storage space if instead of having the hand-hole in the center, the shelf was made long enough to permit the fingers to take hold of the book (back) at the opposite ends?" and replied, "The shelf would necessarily be made about two inches longer to do that. That would mean simply one-tenth additional space."

The State of the Art.

Richmond, Indiana, Shelf (Defendant's Exhibit, M. R. J., No. 1).

This is a flat board with a central notch and two inconsequential rollers let into the face rearward of the front edge. This is testified to by the witness Dudley (p. 70, Q. 295), who states the purpose to avoid the objections of setting heavy books on end. Of course, they lasted longer flat, but because they were flat, and not because of the rollers, which it will be evident did not prevent the book from rubbing against the front edge in pulling on and off, or against the top of the board on which it rested. Jewell also testifies to this shelf (p. 51, Q. 146 *et seq.*), but, although an expert, he nowhere says that the shelf embodies the invention of the patent in suit.

Complainant's expert, Freeman, however, testifies in rebuttal (p. 44, Qs. 16–19) that the Richmond shelf does not contain the structure of the claims of the patent in suit.

Complainant's witness, Hine (p. 36, Q. 4), states that the Richmond shelf would not protect the book from wear in passing it onto the shelf that the friction is not removed from the cover, and the shelf would chafe the sides of the cover.

As none of defendant's witnesses allege that the Richmond shelf embodies the elements of the claims of the Hoffman patent, or that it will effect the purposes of the Hoffman shelf, we fail to see that this Richmond shelf is of any pertinency to the case. It has no supporting frame, and it is close and will not permit air to circulate or dust to escape. There is no series of bearings, no series of supporting rollers, no front rollers, and it does not secure a front roller support while affording a hand hole.

The Jewell & Yawman 1886 Structure (Defendant's Exhibit, M. R. J., No. 6).

This was not a shelf, but consisted of two book-supporting bars placed on edge and supported by transverse flat strips secured permanently to the case. *The book rested on the edges of the two bars running fore and aft.* There was no series of supporting rollers, but two front rollers and one at the extreme back; the front bar being flat pinched the fingers between it and the book, as testified by complainant's experts and admitted by Jewell. (Jewell, p. 66, Q. 258.)

This Jewell & Yawman structure had the front rolls close against the front edge of the flat front bar. The hand *could not pass back of the front rolls.* As the Board

of Examiners-in-Chief, in its decision says, the front rollers "are in close contiguity to the front flat bar of the frame."

The Position of the Patent Office Regarding the Exhibit 1886 Shelf.

The Board of Examiners in-Chief and the Commissioner both recognized in the 1886 structure a possible embodiment of the invention in dispute, but gave the parties no benefit from it, for two reasons:

1st. *Because there was no evidence of conception* of the invention by Jewell & Yawman at the time such structure was made. As stated in the decision of the Board (Rec., p. 108):

> "Neither Jewell nor Yawman pretend that they had any such idea of a hand space in their heads."
> "And Yawman says, when asked by his own attorney:
> "'Why did you make this Exhibit 1886 Shelf?
> "A. We expected to cheapen the article and get it down at as low a price as possible."'
> "And Erbe, a partner of Yawman, says, in answer to Q. 9:
> "'Q. 9. Was there at that time any advantage recognized in having a space or opening at the front between the short rollers; if so, what was it?
> "'A. There was no advantage recognized in having the rollers set apart, that I know of, except to produce a cheaper shelf.'"

The Commissioner, in his decision (Rec., p. 110), recognized the exhibit as a possibly undeveloped form of the invention.

2d. *Because the device was experimental and abandoned.*

As stated by the Board (Rec., p. 107)—

> "Now, the 1886 exhibit was a mere experimental affair * * * never adopted or even favorably considered, but stood apparently forgotten until discovered and knocked out of the dust by the attorney of Jewell & Yawman in his hunt for testimony to be used in the case."

The Commissioner says (Rec., p. 110)—

> "There is much reason to hold that it was, and was treated as, an experimental device."

These conclusions simply follow Jewell's own statement (Rec., p. 54, Q. 174).

> "It is one of the series of experimental shelves before referred to."

Commissioner Mitchell in his decision suggested that:

> "If it contains the subject-matter of the issue *in a form that has passed the experimental stage* priority must be awarded to Jewell & Yawman."

It can not be said, therefore, that the Patent Office rejected the 1886 structure as wholly without the scope of the issue in controversy, but it is manifest that had it been followed up diligently, or had there been shown any conception of the invention at the date of its construction, it would have been considered sufficient to support a claim for priority of invention. The main ground of the Commissioner and Board for disregarding it was that it was *experimental* and abandoned.

But a party can not date back an invention to an abandoned experiment.

Whitely *v.* Swayne, 7 Wall., 686.

The Jewell & Yawman 1886 shelf, even if it embodied all that is claimed in the Hoffman claims, would not in any way limit the latter, or justify the defendant in its infringement or use of a shelf frame having a part intermediate the front rollers carried back or with a space or recess to receive the hand.

Jewell has fixed the date of the invention (if it can so be called) of the Jewell & Yawman 1886 shelf as in December, 1886 (Rec., p. 54), where, in answer to the question asking the date of completion, he says: "Some time in December, 1886, to the best of my recollection."

Subsequent to the interference proceedings, upon a motion which was made by counsel for defendant before Justice Cox for leave to file a supplemental bill, evidence was produced showing that the date of the Hoffman invention of the frame with the intermediate space or reentrant bend was earlier than the date of invention of the Jewell & Yawman 1886 shelf.

In his decision upon that motion (68 Official Gazette, 1390), Justice Cox says:

> "It is said that the evidence already in the cause does not show the date of Hoffman's invention of the essential feature of his patent of 1891—the hand space in the front of his shelf—to have been before February 12, 1887, the date of his application, whereas it has only recently been discovered, without any lack of diligence on defendant's part, that this feature of the invention was anticipated by one Wundt as far back as October, 1886, who then manufac-

tured and sold similar devices. On examining the papers I find that the interference proceedings between Hoffman and certain Jewell and Yawman in the Patent Office, and the testimony taken therein, were put in evidence in this cause by the counsel for the defendant, Mr. Mussey.

"The evidence in that proceeding—Hines and Hoffman—as further explained by Mr. Freeman's affidavit in relation to the present application, shows that Hoffman's invention, as far as this re-entrant bend or hand-space is concerned, goes back to February or March, 1886, and that Hoffman then had constructed and was selling large numbers of shelves with this feature. Such a shelf, known as 'Hoffman's Exhibit Hoffman 1886 Shelf,' was in evidence in that proceeding, and is now produced.

"Mr. Hines' affidavit now filed corroborates Mr. Freeman as to the date of Hoffman's first invention."

It therefore is shown that the Jewell & Yawman 1886 shelf forms no basis upon which to claim either anticipation or the right to manufacture any structure embodying the elements of the Hoffman claims.

From this decision fixing the date of Hoffman's invention of the frame with the hand hole or recess in it between the forward rolls, no appeal was taken.

The Adams Patent of 1886.

This has no *frame* whatever. The roll-supporting structure has no rigidity or integrity without the case, and is essentially in two parts, one movably connected and the other rigidly attached to the case. The main body of rollers D, is supported by two loose bars A A, with sharpened points *c* at the forward ends. The case has two fixed bars B B, and the bars A A rest thereon

"so as to permit their being moved laterally," and the use of retaining screws is optional. There are two other rolls which are fixtures, being supported by a "novel-shaped spring E" fixed to the outer bar B of the case. The only thing separable from the case, therefore, consists of the two loose bars A A. It would be a misnomer to call these a "frame." Further, if a frame, these bars do not support the front rolls, as called for in Hoffman's claims. The front rolls are supported, not by the part that supports the back rolls, but by a spring secured to the case. Further, they are not supported in the case, but project beyond the front thereof. As so well stated in the decision of the Court of Appeals, they prevent the use of doors; they do not support the book when in the case; they do not facilitate entrance of the book or prevent contact with the front of the bars A (because they yield and descend under the weight of the book). They have no connection with the system of rolls inside, and the intermediate recess answers no useful purpose.

Complainant's experts all declare the Adams structure useless and impracticable. (Freeman, Rec., p. 20–35; X-Q. 42; p. 25, X-Q. 57; Hine, p. 36, Q. 3). Jewell, produced as an expert for defendant, was asked, Rec. p. 61, X. 225): "Now, I would like you to state, under your oath, and as an expert familiar with the art, whether or not you would ever recommend to anyone to put into practical use the construction illustrated in the drawings of the Adams patent?" and replied, "*I should not recommend any such shelf for practical use.*"

An exhibit (marked M. R. J. No. 3) was produced, made from a pencil sketch of the Adams patent (Jewell Rec., p. 68, R-D. Q. 267), which was admittedly incorrect in every detail (see Jewell's cross-examination, Rec., pp. 55–60); and Jewell testifies (Rec., p. 70, R. D. Q. 284) as regards even this altered structure that it would be marketable only because people will buy even "ridiculous" things.

Jewell admits (Rec., p. 69, R-Q. 281) that the statement in Adams' patent that the spring E may be applied "to lids of match, tobacco, and other boxes to open them" is "simple nonsense."

Jewell & Yawman's application, No 414,104, was rejected on the Adams shelf, and their attorneys, in reply (Rec., p. 117), properly set forth the character of the Adams structure, as follows:

> "In regard to the Adams patent cited, it will be noted that it does not describe or show a *portable* shelf which can be handled and adjusted as an entirety, nor one of such construction as to permit the ready application and removal from the case of heavy books. In the Adams patent the shelf is made *a part of the case.* The two short spring-sustained rollers are not adapted to assist in sustaining the book when the latter is in place, as in the applicant's case, their office being to yield when the book is placed thereon preparatory to pushing it back on to the shelf proper, and by this yielding movement *to assist, as it is stated in the specification, in forcing the book onto the rollers D D.* See lines 38 to 58 of the Adams specification. The front edge of the shelf proper in this patent terminates some distance in the rear of the front edge of the side walls of the case, and, inasmuch as it is not customary for the front edge of the book to project beyond the case, it

follows that when the book is in place it will be supported entirely by the rollers D within the case. This being so, it is obvious that in the patent *the space between the short rollers does not answer the purpose of the space in the applicant's construction, nor was it ever intended to be used in the same manner or for the same purpose.*"

The Conant United States Patent No. 316,241.

This shows a structure the same as that testified to as having been used in the United States Patent Office, and consisting of parallel wood rolls.

This Patent Office structure is testified to for defendant by witness Dodge (pp. 72–74, Qs. 301–311), and for complainant by witness Freeman (pp. 16, 17, Qs. 10–17), and Lawler (pp. 48, 49).

This structure was not a shelf, but a case with side strips for the journals of long and permanent rollers extending from side to side, and 2 or 2¼ inches in diameter.

Mr. Freeman, who was employed in the Patent Office for over ten years (p. 10), states that the structure does not embody the Hoffman claims (Rec., p. 45, Q. 21), and (p. 16, X-Qs. 10–14) his personal experience in the pinching of his fingers between the heavy books and the large rollers, and refers to the sagging of the rollers (p. 17, X-Q. 16) as "a common feature of the old roller portfolios used in the Patent Office"; and Lawler states (p. 48, Qs. 3 and 4) that the roller bearings were fast to the sides of the case, and (Q. 7) that the portfolios which rested on the rollers were from 30 to 45 pounds in weight, and the rollers (X-Qs. 10, 11) went out of use in 1867.

The various other letters patent referred to in the appellant's brief were not produced in evidence or explained by the defendant's experts.

In Bischoff *v.* Wethered (9 Wall., 812), the court ruled that it was not the duty of the court to make a comparison of different patents, unsupported by any explanatory evidence, for the purpose of invalidating a patent upon which suit had been brought. The patents cited by appellant (with the exceptions named), are, therefore, clearly out of the case.

If, however, they are considered, it will be found that no one of them is pertinent to the Hoffman claims.

Referring to the same *seriatim*—

The Harris patent, 1870 (Record, p. 142, 145).—In this, as in the Patent Office shelf, there is no "*frame*," the parts D being bars forming part of the case and receiving the journals of the rollers—that is, take the case apart and the rollers fall out. There are no rollers "carried by" a frame. The front roller is not in two separate sections—no part of the frame is carried back.

Boone patent of 1876 (Record, p. 145, 147).—There is no frame and no rollers carried by a frame. No series of rollers. No roller in separated sections. No part carried back to admit the hand.

Wolfe patent of 1879 (Record, p. 147, 149).—There is no shelf frame, but three separate channeled bars to each support. There are rollers which may, perhaps, be desig-

nated as horizontal, but nothing which can be properly termed "a frame" by which they as a whole are supported. There is no front roller in two sections, having any peculiar relation to the other body of "horizontal rollers." It certainly would be a misuse of language to apply the terms of the Hoffman claims to a structure so utterly different as Wolfe's.

As regards the bearing of these patented structures, upon a structure like that in controversy, we have record evidence of the defendant's opinion. Jewell & Yawman's attorney says, in argument (Rec., bottom of p. 132)—

> "*Conant* does not show a rigid or connected frame with rollers therein. His supporting bars E and the rollers are assembled and held in proper relation by inserting the bars in grooves which require to be cut in the supporting case. The front rolls are not supported in the same frame as the others, or indeed in any frame. They are mounted simply in vertical bars which are attached to the front of the case."

As to the *Harris* structure, Jewell & Yawman's attorney says (Rec., p. 117 third paragraph)—

> "The Harris patent cited does not show a shelf in which there are two short rollers sustained in front of the frame with a space between them for the hand. It is not seen therefore what bearing this patent can have on the present invention."

As to the *Adams* patent, Jewell & Yawman's attorney (Rec., p. 117) denied its similarity and efficiency in terms

which have already been fully quoted, and concluding as follows:

> "It is obvious that in the patent the space between the short rollers *does not answer the purpose of the space in the applicant's construction, nor was it ever* intended to be used in the same manner for the same purpose."

As regards the various references cited by the Patent Office, Jewell & Yawman's attorney said (Rec., p. 132):

> "The device on which applicant seeks a patent is now extensively manufactured, and its rapid adoption would seem to be a strong evidence of the fact that it supplied a demand *not answered by other devices known in the art.*"

Roller Structure of Fig. 16, Catalogue.—This is illustrated opposite Rec. p. 82 and on page 13 of appellant's brief, and is substantially the Patent Office Shelf with a metal frame.

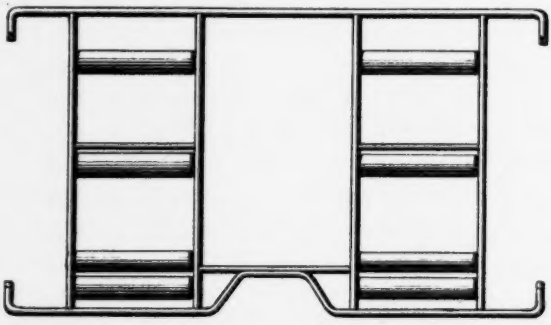
It will be seen that such a frame can not be rigid or strengthen the case, as the long rolls prevent cross bracing; that the book is supported partly by the rolls and partly by bars carrying cross pieces; that the structure has neither the frame nor roller arrangement called for in the Hoffman claims, and is obviously open to all the objections stated by complainant's experts regarding the continuous roller shelves. It is this class of shelf that demands the increased space stated by Hine (Rec., p. 186), and which has been supplanted by the Hoffman shelf.

The Hoffman Invention not Obvious.

It is assumed by the defendant that a metallic frame with rollers being old, and hand holes in wooden shelves being old, the mere suggestion of supplying such a frame with a hand hole or recess would result in the construction set forth in claims 1 and 2 of the patent.

Such is not the case.

A shelf might be made, as shown below, with forward rolls back of the front bar of the frame,



and would not be within these claims. The third claim of the patent was inserted to cover this structure (shown in "Hoffman's Exhibit 1886 Shelf," in which the recess extends between the forward rolls of the shelf, and there are none in front of the frame.

Exhibit Jewell and Yawman 1886 shelf (like Fig. 2 of the drawing following Rec. p. 126) shows another way of making a frame with separated front rolls, and back roll, but not within the terms of Hoffman's claims,

because the frame has no *series* of horizontal rollers supporting the book, the latter being supported by bars running fore and aft.

The Richmond 1873 shelf is another illustration of the manner in which experts might endeavor to embody a hand hole in a roller frame yet not embody the combination of the Hoffman claims. Still another is the ridiculous structure of the Adams patent (following Rec. p. 150), where there are two series of rolls, and what it (improperly) contended is a frame.

It therefore does not follow that anyone skilled in the art would, in the exercise of mere mechanical skill, of necessity make the construction of the Hoffman patent in seeking to embrace the features of rollers and a hand hole. The fact that those skilled in the art, with the idea of roller supports, hand holes, and metallic frames in their minds, should have carried out such an idea by means of the inefficient structures just referred to is sufficient evidence that the Hoffman structure was not, as contended, an obvious one. If it was obvious, why did not Hoffman make it at first, instead of making Exhibit Hoffman 1886 Shelf? Why, then, did others make the structures of the Jewell and Yawman 1886 shelf, the Richmond and Adams and Wolfe shelves, no one of which embodies the construction of elements called for in the Hoffman claims 1 and 2?

Further, it appears that roller shelves were used in the Patent Office substantially like those of Conant's patent of 1885, Harris' patent of 1870, and others. It was desirable to provide such structure with rigid frames,

and to avoid the objections to continuous rolls, yet these were not altered or supplanted during the fifteen years preceding Hoffman's invention, as they would have been had the change been an obvious one.

Alleged Lack of Invention.

Defendant alleges want of invention in the Hoffman structure in view of the prior art.

The courts have repeatedly held that where skilled mechanics have had certain structures before them for years, and did not make the change finally effected by the patentee, the invention could not be said to be obvious or one requiring mere mechanical skill.

> "The decisive answer is that with dozens, and perhaps hundreds of others, laboring in the same field, it never occurred to any one before."
>
> Potts *v.* Creagor, 155 U. S., 608.

The fact that others did not make the improvement shows that it was not obvious.

> Dubois *v.* Kirk, 158 U. S., 63.

The change over existing structures made in the structure involved in Krementz *v.* Cottle (148 U. S., 556) was much less than that made by Hoffman, yet it was held by this court to involve invention, and not obvious as others skilled in the art had failed to see, as the patentee did, that a slight change would obviate known defects and secure material advantages.

The general rule repeatedly laid down is stated in Dederick *v.* Cassell (9 Fed. Rep., 306)—

> "If it be true, as alleged by the defendant, that all

> the parts embraced in the plaintiff's press may be found in the various devices previously used to compress hay, cotton, peat, and clay, the plaintiff's right to the new combination which he constructed would be none the less complete. It will not answer to say that this required no invention, that any mechanic might have selected the parts and combined them. The same might be said with equal force in almost every instance in which a patent for a combination is issued. The fact that no mechanic did select and combine the parts and produce such a press, notwithstanding the great need for it, is a sufficient answer to the suggestion."
>
> See, also, Loom Co. *v.* Higgins, 105 U. S., 591.

But in citing these authorities, it is not admitted that Hoffman merely selected old features out of the prior art and combined them. On the contrary, a frame with two sets of bearings for two sets of rolls, the forward bearings in front of the main frame and separated, and a space between, was new in itself. The arrangement of two sets of rolls, one to support the body of the book and the other consisting of two separated rolls, was new in itself. And the combination also was new.

Defendant contended, before the lower court, that at the date of Hoffman's patent the field for improvements in roller shelves was very circumscribed by the roller shelves before in use. But the evidence shows—

1st. The fact that the only roller shelf actually in use to any extent at that date was a shelf with longitudinal parallel rollers.

2d. That this form of shelf has practically been superseded by the Hoffman shelf, and would not be used at all to-day if the Hoffman shelf was public property.

"In consequence of the excellence of this character

of shelf they rapidly displaced other forms of metallic shelving, so that, to my knowledge, there are very few of other forms of metallic shelving being at present (1892) manufactured and used." (Hine, Rec., p. 32; see, also, bottom of Rec. p. 132.)

The Claims in Suit not Limited to Mere Details of Construction.

Defendant contends for a narrow construction of these claims.

These claims are not, as contended, broadly for a roller shelf with a hand hole.

As stated by the Commissioner (Mitchell) in deciding the interference (Rec., p. 109):

> "A book shelf in order to contain the combination embraced in the issue, must have the following features: (1) A supporting frame; (2) a series of horizontal rollers carried thereby; and (3) a front roller formed in two separate sections, the intermediate part of the frame being carried back to permit the introduction of the hand between the roller sections."

This definition is accepted; and it is submitted that it does not limit the invention to mere details of construction, and that nothing cited in the record demands such limitation.

Thus, provided there is an open metallic frame with a recess and different bearings peculiarly arranged as specified, it is immaterial whether the bars of the frame are of one shape or another; and, provided there is a series of rollers to support the book, and the two sepa-

rated rollers in front of the frame and supported on opposite sides of the recess, it is immaterial whether there are more or less rollers, or how they are otherwise arranged. The Hoffman patent itself shows, in Figs. 1 and 2, two different shelves having different forms of recesses and different numbers of rollers, thus showing that the patentee and the Patent Office included very different forms under the terms of the Hoffman second claim.

If the differences between the structures made by the defendant and that shown in the Hoffman patent are material, and result in advantages or novel effects, there might be grounds for defendant's position that the shelves are different; but it is important to note that *the defendant's experts* NOWHERE HAVE POINTED OUT OR HAVE ATTEMPTED TO POINT OUT THAT ANY SPECIAL OR SUBSTANTIAL ADVANTAGE OR DISADVANTAGE RESULTS FROM SUCH SLIGHT CHANGES AS APPEAR IN THE DIFFERENT FORMS OF SHELF FRAMES.

Plaintiffs' experts have pointed out that the differences in the frames are wholly immaterial, and that therefore one is practically the same as, or the full equivalent of, the other, and that the Hoffman claims having no limitations as to details of construction, are not limited to any details of bars, forms, or proportions, provided they constitute an open, rigid frame, have separated roller bearers, and a central recess between the two front roller bearings.

Defendants having contended before the Patent Office that shelves of the Hoffman and the Jewell & Yawman

applications (the same as Fig. 17, O. S Co. Catalogue) were alike, and under the terms of the same claim, now contend that they differ and that such differences are vital, and that the Jewell & Yawman (or defendant's) shelf is not embodied in the terms of the Hoffman claims. In support of this, they refer to the Hoffman file-wrapper and contents (improperly introduced in evidence, against objection, as hereinafter shown), which show simply efforts upon the part of the applicant to meet the objections of the Patent Office by reforming his claims. What view of the allowed present claims the Office took is shown by the fact that it included in interference the shelf of the Jewell & Yawman application and that of the Hoffman application. Defendants accepted the interference, and spent large sums of money, not in trying to show that the two shelves were different, but in efforts to prove that Jewell & Yawman were the first inventors. No difference was discovered until the Commissioner finally found that Hoffman was the first inventor.

The Commissioner said, in his decision (p. 109) regarding the combination of frame and rollers and "intermediate part of the frame * * * carried back to permit the admission of the hand between the roller sections: *these elements are contained in the interfering claims of both parties.*"

Undoubtedly, as defendants contend, the courts in some instances have held that when a patentee has presented broad claims and withdrawn them, he can not construe his patent as if the broad claims were still there.

But, while the applicant, Hoffman, presented claims in different forms to meet the objections raised by the Office, he always had what are practically claims to the same subject-matter (see original claim 3, Rec., p. 85; claim 5, p. 88); the latter being filed November 22, 1887, and retained until finally granted, and being only a paraphrase of the preceding claims. Further, while the state of the art required the erasure of too broadly and indefinitely worded claims, the fact that the substance of these claims was finally granted, and that two structures so different in detail as Jewell & Yawman's and Hoffman's were included under the same claim, is evidence that the Patent Office did not find that the art required any such limited construction of the claims, as defendant *now* contends for.

Nothing in the prior art necessitates a limited construction of Hoffman's claims.

If the terms of Hoffman's claims could be read upon some old structure, and it was necessary to read into the claims some features of construction peculiar to the Hoffman structure and not found in the other, then, under recognized theories of construction, the claims, to be saved, would necessarily receive a limited interpretation.

But there is nothing in the prior art to which the Hoffman claims apply. Nor is there any prior structure so analogous that the Hoffman claims, to be sustained, must be read with any such limitations as the defendant contends for. There is no evidence of the prior con-

struction and use of any shelves, except the Patent Office parallel rollers similar to those of Conant's patent, the old straight metal shelf, and the Harris patent rollers; these are all substantially alike, and all went into disuse or were displaced by the Hoffman shelf.

As regards the Jewell & Yawman 1886 shelf, the defendant contended during the entire interference proceedings that this involved the combination of the issue and of the Hoffman claims, which were the same as the issue. If, as now contended, the defendant's new No. 4 shelf is the same as the Jewell & Yawman 1886 shelf, then it comes within the terms of the contention of the defendant before the Patent Office.

The position of the complainant regarding this Jewell & Yawman 1886 shelf is now in no way inconsistent with the position taken before the Patent Office. It was there contended that that shelf did not embody the combination of the issue, there being no *series* of rolls supporting the books, the structure itself not consisting of a shelf, but being a part of a case and built rigidly within the latter, and not separable therefrom, and the book *resting upon the edges of two parallel bars.*

It was further shown that this 1886 shelf afforded no evidence of the conception of the invention. There was nothing connected with it, or the testimony regarding it, which showed that at the time of its construction the parties had the idea of producing a shelf with a recess

into which the hand could be admitted; and it was pointed out that the rolls were so close to the edge of the shelf that the hand could not possibly get back of the said rolls, and that the hand was cut by the front sharp edge of the flat front bar.

It is not recognized that the new No. 4 shelf is the Jewell & Yawman 1886 shelf. The new No. 4 shelf has two series of rollers, one supporting the body of the book, and the other in divided sections in the front of the frame. The book is supported upon the rollers and not upon the edges of bars. The shelf is obviously constructed to afford a passage for the hand between the front rollers, and in these respects the shelves are subtantially different.

Complainants do not now and never did contend that a structure like that of the 1886 Jewell & Yawman shelf embodied the combination or the invention of the Hoffman claims.

Hoffman's Claims are not to Mere Aggregations.

The objection to claims as aggregations has only been applied to claims for machines or articles where the latter consist of separate old parts combined, each performing its known function. It has never been applied to defeat a valid combination of old elements, otherwise no combination claim would be valid.

In Loom Co. *v.* Higgins (105 U. S., 591), this court used the following language:

> "It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention."

This recognizes that such a combination is not a mere aggregation.

In Hailes *v.* Van Wormer (20 Wall., 353), the article, a stove, was old in its general features; and certain devices, each old in itself, were assembled in the stove without either in any way modifying the action or effect of the other. This the court held to be mere aggregation.

But in the case of a concrete article like a shelf, there are no separable devices. There are separate elements or parts, neither capable of any separate function, but both coacting, the rollers merely arranged to support the book, the frame specially constructed to support the rollers. So far as the general effect is concerned, neither part of itself performs any separate function; neither would act without the other.

So, in Reckenderfer *v.* Faber (92 U. S., 347), there were two articles, each having a separate function, united in one structure, *i. e.*, a pencil and a rubber; each was operative in and by itself, and neither modified the action of the other.

The question of aggregation was not involved in Phillips *v.* City (111 U. S., 604), it being held that the combination did not involve invention.

In Brinkerhoff *v.* Al e (146 U. S., 515), the article was held to be anticipated in the art. It was further held that "no new result or effect was produced by the united action of the old elements." This differs essentially from the case now at issue, where every element co-operates with all the others to secure the ultimate result; no single element is capable of acting alone to produce any result. The separate bearings of the frame are essential to support the separated rollers, the separated bearings and rollers are essential to the presence of a recess or hand hole, and the separated bearings of the frame, as well as the separated rollers, were each novel in shelves with or without the intermediate recess.

In Palmer *v.* Village of Corning (156 U. S., 342), the claim was for a sewer grating provided with pins for supporting it in an elevated position upon a ring. The grate performed the same function whether elevated or not, and the pins did not modify the action or coact to secure it. There was no such unity of action as in the Hoffman structure, where no one part has any function alone, as had the grating involved in Palmer *v.* Village.

In Richards *v.* Elevator Co. (158 U. S., 299), the alleged combination involved a railway track, building, hopper, scales, and spout, each performing its own function and no way modifying that of the other. Each element, unlike the elements of Hoffman's shelf, was capable of separate use. No one of the features had a novel construction; in this, also, differing from Hoffman's device, where the frame is new and peculiar, and the arrangement of rolls also novel.

The *facts* do not support defendant's position on the question of aggregation. Defendant assumes that Hoffman merely combined old elements, each having known functions. But the elements are not old. The *frame*, as a frame, is totally unlike any prior frame, in having two different arrangements of supports with a recess between the front supports. The series of *rolls*, as such, is divided into two sections, the forward section of two separated rolls, and this element is new. The argument based on assembling old devices to act in old ways does not apply..

The Jewell & Yawman Patent 557,392 and the File Wrapper and Contents of the Hoffman Application not properly before the Court.

The complainant in this case should not be called upon to make any reply to the matters raised by the defendant regarding the actions of the Patent Office in the prosecution of the Hoffman application.

It was competent for the defendant in its answer to the bill of complaint and evidence in pursuance thereof to set up any defense it could, based upon the Patent Office records, *but this it failed to do.* The answer of the defendant did not set up any patent under which defendant was operating nor raise any question as to any estoppel or limitations resulting from the acts of the patentee during the prosecution of his application; nor was any motion made to amend the answer nor any evidence offered on these points before submitting the case to the court.

It was not until the case had been submitted on its merits, argued and decided, and was before the Auditor in the accounting, that the defendant offered in evidence the file-wrapper and contents of the Hoffman patent in suit (p. 201, folio 351), and also (p. 200, folio 349), the letters patent to Jewell & Yawman, No. 557,392, *issued since the beginning of this suit*, and since the granting of the injunction therein. Objection was duly made to the introduction of this evidence as improper at that stage of the proceedings.

Where an issue was not made in the pleadings "it was too late to first raise the point before the master."

Rubber Co. *v.* Goodyear, 9 Wall, 801.

The defendants can not avail themselves of a defense not set up in the answer.

Herring *v.* Gage, 3 Banning & Arden, 402.

Dunlap *v.* Schofield, 152 U. S., 249, quotes 9 Wall., 801, as follows:

> "No such issue was made by the pleadings. It was too late for the defendants to raise the point before the master. They were concluded by their previous silence and must be held to have waived it. It can not be considered here."

On the merits of the evidence as to patent 557,392, if admitted, it is submitted that this patent was issued March 31, 1896, three years after the injunction order in this case and during the accounting, and with a claim (p. 158) limited to the detail of supporting the front rollers in brackets adapted to be secured to the front bars of

different shelves. This construction is not precisely that of the new No. 4 shelf (drawing opposite p. 233, Exhibit C).

The Grant of a Patent to Defendant not Evidence of Non-Infringement.

Defendant claims that the grant of this patent is evidence that the new No. 4 shelf is not an infringement of the claim of the Hoffman patent.

The fact that a patent issues on a particular detail of construction is not conclusive evidence that the structure does not infringe a prior patent. At the most, it has been held to create a *presumption*, which, like other presumptions, may be rebutted. If this was not the case any pirate might justify his piracy by modifying a patented device and securing a patent for his particular way of making it.

The defendant justifies his position by the decision of the Supreme Court in Boyd *v.* Janesville Co. (158 U. S., 260), but in that case both applications were pending in the Patent Office at the same time. There were no interfering claims and no interference, and therefore the court considered that the Patent Office recognized that the first patentee did not intend to make any claim covering the structure of the second patentee. The court held that the grant of the later patent raised a *presumption* only, but the experts testified that the two devices differed "in principle and operation," which confirmed the presumption. The experts have not so testified in this case.

In the present case, Hoffman's patent (Rec., p. 139) was dated April 7, 1891, and Jewell and Yawman's application, on which patent 557,392 issued (Rec., p. 157), was not filed until December 5, 1891, so that they were not pending concurrently.

Further, Jewell & Yawman had just been defeated in a contest with Hoffman, and no further interference could have been declared, and the record shows that while they made at first broad claims (Rec., p. 114) they were repeatedly rejected (pp. 114 to 123), until they had restricted their claims to the merest structural details. The attorneys for Jewell & Yawman (Messrs. Church & Church, p. 121), pointed out that the particular way of mounting the front rollers to secure the hand hole had certain alleged *structural* advantages, and the claim was granted on this feature of construction.

In Corning *v.* Burden (16 How., 265) the fact of a patent to defendant was allowed to be proved, because—

> "it shows at least the defendant has acted in good faith and is not a wanton infringer of the plaintiff's rights, and therefore ought not to be subject to the same stringent and harsh rule of damages which might justly be inflicted on a mere pirate."

But in that case, as in Boyd *v.* Janesville, the defendants were manufacturing under their patent when suit was brought, while in the present instance the defendant secured the patent after decision against it and while under injunction, the claim being on a mere detail of manufacture. The furthest limit to which any court has gone is in ruling that the fact that defendant's

device is patented is proof *prima facie* of non-infringement. (National Co. *v.* Hanby, 54 F. R., 493.) But even there the court accepted the ruling in Brown *v.* Selby, 2 Biss., 457, that—

> "If the plaintiff is a prior inventor and patentee their claims, as far as they trench on his, must yield."

Whatever the *prima-facie* position, it is always subject to rebuttal, and in the present case it has been most effectually rebutted.

The reports are full of cases where the defendants are restrained, although operating under letters patent later than those sued upon. See, for instance—

Holliday *v.* Pickhardt, 12 F. R., 147.

Standard *v.* Crane, 56 F. R., 718.

Concurring Decisions.

The Primary Examiner, the Examiner of Interferences, the three members of the Board of Examiners-in-Chief, and the Commissioner, all found that the constructions of the Hoffman drawing and the Jewell & Yawman drawing, although differing in detail, were *substantially* the same thing and included by the Hoffman claims, *and defendant* THEN *acquiesced in this.*

Since the grant of the Hoffman patent, Chief Justice Bingham, the Auditor, Justice Cox, and the three Justices of the Court of Appeals have found that the Hoffman, and the Jewell & Yawman shelf Fig. 17, and the shelf Hansmann Sketch, notwithstanding structural

differences, were substantially the same thing, and within the terms of the Hoffman claims. And the Auditor and the Justices of the Court of Appeals found that the construction of the New No. 4 was also substantially the same as the Hoffman structure, and within the terms of the Hoffman claims.

The No. 4 shelf was not before Justice Bingham nor considered on the question of infringement by Justice Cox, so that every one of the various tribunals before whom the question of identity has been considered during the past twelve years has decided that there is no substantial difference between the complainant's and defendant's structure, and that all are within the Hoffman claims.

Further, during all this time defendant has failed to even attempt to point out any change of function or effect resulting from the difference between Hoffman's shelf and defendant's shelves.

If any weight is to be given to concurring decisions, the question of infringement has thus been practically settled.

The Decision in the Second Circuit.

As against the concurrent finding, there is the decision of the court in the Second Circuit.

There is no evidence here of the infringing construction before that court, but the evidence which is now presented, it is submitted, is abundantly sufficient to show that the court erred in its opinion, founded, as it

appears, upon the assumption that all that Hoffman did was to assemble two old well-known features in a structure in which each produced its recognized known effect.

There was no such prior art as assumed. Shelves with iron frames (not rigid) were old, but no frame had been made that could be used in the Hoffman structure. Rollers had been arranged in frames, but never in a manner to effect the result secured by Hoffman.

Hoffman, therefore, reconstructed the old frames and rearranged the old rollers; facts which it appears the court failed to recognize, but which if recognized would inevitably have led to a different conclusion. It is believed that this court, by recognizing the extent to which Hoffman departed in every way from prior structures, will practically reverse the decision of the court in the Second Circuit.

Infringement.

The defendant has made shelves which have been called the "Jewell & Yawman Shelf;" the shelf of "Fig. 17, Office Specialty Manufacturing Co. Catalogue;" "Exhibit Hansmann Shelf" (which is like Exhibit M. R. J. No. 5, Rec., pp. 53, Q. 169), and the "New No. 4 Shelf." (See drawings opposite Rec., pp. 82, 135, 233, 282.)

The "Jewell & Yawman Shelf" (opposite p. 135), "Fig. 17, Office Specialty Manufacturing Co. Catalogue" (Ex. A, opposite p. 82), and "No. 4 Shelf" (same Ex. A, opposite p. 233) are different designations of the same form of shelf.

To avoid the consequence of infringement, defendant contends that Hoffman's claims, if valid, must be construed to include only the particular construction of Fig. 2 of the Hoffman patent, where the front bar is *bent* inward. Why Fig. 1 is ignored, where there is a square recess formed by the side bars and a different number of rolls, defendant does not inform us. (The reduction of this figure to accord with the size of the record somewhat obscures the same, and a full-sized lithographic duplicate of the Patent Office drawing is annexed hereto.) But defendant's contention ignores the terms of the claims.

The claims are not limited to a "bend," but contain the alternative term "OR recess." In claim 2, the term is broader, that claim requiring only that some part of the metallic frame structure shall be "carried back," this part being the part "intermediate" of the roller sections.

If there is any reason to ignore the meaning of these terms, defendant's experts have failed to set it forth; while complainant's experts have expressly stated that they include such structures as the defendant's. (Hine, Rec., pp. 34, 35; Freeman, pp. 13, 14.) And even defendant's expert admits the identity, Mr. Dodge (Rec., p. 77), on being asked, Q. 324, to compare the Hoffman and Jewell & Yawman shelves, "and state which, in your opinion as a mechanical expert, is the superior frame," saying:

> "Mechanically considered, I should say the shelf shown, marked "Ex. M. R. J. No. 5" (the Jewell &

> Yawman shelf), was the better frame of the two, because it is stronger and less liable to sag at the centre. It is braced by the angling position of the rear bar. *I would not, however, think that there was any very material difference between them* when firmly secured in place in the case, while I would give the preference to Ex. No. 5 if I was going to select."

Here the defendant had ample opportunity to put on record any *practical* result in the slight changes of construction made by it over the Hoffman shelf, and failed to do so.

The defendant's expert Steuart pointed out minutely every detail of difference in the structure; but *neither Steuart nor Dodge points out or alleges any difference in purpose, function, result or operation between defendant's frames or any of them and the frames like those shown and claimed in the Hoffman patent.*

A difference without change of purpose, effect, or operation is not a material difference.

In each shelf made by the defendant there is an open rigid frame of a peculiar character, in that it has bearings arranged to support a series of rollers on which a book may rest; the front bearings are separated from each other; the frame between the front bearings has a recess or is carried back. In the Fig. 17 shelf (p. 82) the part of the frame which forms the recess is one bar or strip bent back and secured to a bent cross-bar; in the Hansmann shelf (Ex. B., opposite p. 233, and opposite p. 159) the part of the frame that forms the recess consists of two parts connected to the straight cross-bar. In the "New No. 4" shelf (Ex. C, opposite p. 233, and opposite

p. 282) the part that forms the recess is in two parts, both secured to the straight front bar.

In the Hoffman frame the part that forms the recess is simply not so wide as that in the other frames, leaving two straight parts on opposite sides of the bent part, but the latter had the bearings for the separated front rolls, each pair of bearings in front of the front part of the frame.

Need we point out that these are the *same things?* Each frame is a rigid open frame; each has bearings for a series of rollers; each has separated front bearings; each has a recess between the front bearings. The differences are in mere trifling details of mechanical structure, but all secure the same result, *and the claims of the Hoffman patent can be, and by complainant's experts are, read on each shelf.*

Defendant nowhere points out any difference of purpose, function, or operation between these frames or between any one of them and the features specified in Hoffman's claims.

What is meant by the terms "retreating bar," "carried back," "re-entrant bend," "recess."

It will be noted that all these terms are applied, and were applied by both parties to the interference and by the Patent Office, to the Hoffman structure, Fig. 2 (Rec., p. 141), where the frame bar between the front rolls was *bent* back to the structure Fig. 1 of Hoffman patent, where there is a square recess, and to Fig. 3 of the Jewell & Yawman application (Rec., p. 135), where a bracket *e projects forward* of the front bar.

Defendant's experts testify that, in their opinion, the terms "carried back," "retreating bar," "re-entrant bend" all relate to a bar actually bent back, and that such a structure as the new No. 4 shelf (Rec., p. 282) does not come within the terms of the claims, because there is no bent bar.

Complainant's experts testify that if the frame has a recess formed in any way, it is the same thing, in operation and result, as a bar bent as shown in dotted lines in the New No. 4 shelf drawing (Rec., p. 282); Hine (bottom of Rec. p. 218 and top of Rec. p. 195).

It is to be noted that defendant's experts ignored the alternative term "*or recess*" used in the Hoffman claim, and which would include any recess formed by bending the bars or otherwise, and the patentee, having thus expressly broadened his terms, is entitled to the benefit of the broader language unless some reason is shown for limiting it.

Nothing has been produced showing that Hoffman was not entitled to a claim covering a frame with a recess made in any way, and all the evidence on both sides is to the effect that the details of construction do not result in any change of effect or operation.

It is submitted that it did not even require expert testimony to show that the terms "carried back" and "recess" are relative, to the two front rolls, and mean that the part of the frame between these rolls is in some way removed, leaving an "intermediate space" to permit the admission of the hand between the "roll sections," as stated in Hoffman's second claim. Claim 1 refers to the front

rollers, as on each side of a "re-entrant bend OR RECESS." It is evident, on the slightest inspection, that each of the defendant's structures (drawing, Rec., p. 233) has a frame which has "a recess," that the front rolls are "on each side of * * * a recess," that part of the frame is "carried back to permit the admission of the hand between the roll sections," and that to all intents and purposes the frame, as a frame, is bent back and has a re-entrant bend.

Even on the most limited construction of the claims, infringement can not justly be claimed to have been avoided by defendant.

The New No. 4 Shelf.

The Supreme Court of the District of Columbia, having decided that the shelf of Fig. 17 and that of Hansmann sketch are the same as the Hoffman shelf, defendant's made the "New No. 4 Shelf," contending that it was not the same as the other shelf and not an infringement of the claims of the Hoffman patent.

It has been shown that the new No. 4 shelf has all the features common to the shelves, Fig. 17, Hansmann sketch and Hoffman shelf. The exhibit drawing filed by defendant (opposite p. 233) shows that the new No. 4 (Exhibit C) as closely resembles the Hansmann shelf (Exhibit B) as the latter does the Fig. 17 shelf (Exhibit A). This is so evident as practically to need no other proof. Complainant's witness, comparing "Complainant's Exhibit Hine Drawing" (opposite p. 282), and showing the new No. 4 shelf with the Hoffman patent,

says (Hine, p. 187) that this exhibit contains the combination of elements of claim 2 of Hoffman's patent, and (p. 188) specifically points out the elements of the claim in the exhibit. Hine states (p. 188, fol. 329) that this shelf accomplishes the same purpose as the Hoffman shelf, made by the Fenton Company, and (p. 189, fol. 330), that, as one familiar with the manufacture and sale of such shelves, he recognizes no difference in practical operation between the Hoffman shelf and that of the Hine drawing.

It was competent for defendant to deny this, if it was erroneous; its failure to do so supports the assertion.

Hine (top of p. 195), referring to the new No. 4 shelf as shown in "Exhibit Hine Drawing," says, that if the two brackets *c c* were continued and bent around to follow the dotted line shown in the drawing, it would not in any way alter the operation of the shelf. This is evident on inspection, and it will be noted that this change merely of the defendant's shelf would make the form precisely that of Fig. 2, of the drawing of the Hoffman patent. Hine says, further (p. 195), that this change would be "simply a difference in detail of construction; that is all. * * * It would change the construction of this just as much, or, perhaps, a little more, than if you take out one of those rivets and put in two."

Defendant's expert, in great detail, points out what he considers to be differences between the Hoffman shelf and the New No. 4 shelf (shown in "Exhibit Hine's Drawing"), and the differences from that claimed in the

Hoffman patent (pp. 202–207), going into minute and unimportant features of construction, but he *nowhere attempts to deny the statements of plaintiff's witnesses that these details are not material, or that they do not change the function or effect.* The plaintiff's testimony on this important point is, therefore, *uncontradicted.*

Defendant's expert attempts to draw a fine distinction based on the fact that in different shelves the parts of the frame around the hand hole are sometimes part of a long bar, sometimes one, and sometimes two separate parts riveted to other parts, but after extended cross-examination he is obliged finally to admit that if the rollers are removed, all that which remains is *the frame.* (Steuart, top of p. 212.) If, therefore, this *frame* has a recess in front carried back of the front roller supports it complies with the terms of the Hoffman claims.

Defendant's expert testified as follows (Rec., p. 218):

> "Q. State whether or not the roller-supporting structure in the 'Exhibit Hine Drawing' is of such a character that there is a recess intermediate the front rollers for the passage of the hand back of the rollers?
>
> "A. There is a space between the brackets in which the front rollers are mounted, if this is what you mean.
>
> "Q. And that space permits the passage of the hand back of the front rollers; does it not?
>
> "A. *It does.*"

(Rec., p. 215):

> "Q. So you admit that it is not necessary to have a bar with a re-entrant bend in order to secure the advantages of the structure described in claim 2; is that so?

"A. In so far as those advantages are described with relation to the handling of the books, *I should say so.*

"Q. If I have understood your direct testimony, it is to the effect that the construction described in Hoffman's patent and claims 1 and 2 thereof is one in which the frame of necessity must have a front bar, one portion of which is bent back of the remaining portion so as to form a re-entrant bend, and that unless a frame has a front bar so bent back it is not the construction set forth in claim 2. Am I right?

"A. This is the specific structure called for apparently in claim 1, but claim 2 does not specify a front bar, but simply that the intermediate portion of the frame shall be carried back. *It is entirely possible that a structure might answer the terms of the second claim that did not have the specific element that you have asked in your question, to wit, a front bar having a re-entrant bend.*"

It is contended that defendant has simply changed this 1886 exhibit in making the structure of the new No. 4. shelf.

But changes which convert an impractical into an effective article are vital, and embody a new structure.

> "It is not sufficient to constitute anticipation that the device relied upon might, by modification, be made to accomplish the function performed by the patent in question if it were not designed by its maker, nor adapted, nor actually used, for the performance of such functions."
>
> Sup. Ct. U. S., Topliff *v.* Topliff, 145 U. S., 161.

By parity of reasoning, infringement can not be justified by changing an old abandoned device so as to secure the effects of a patented structure, and thus connect the two to secure the date of the first.

The Doctrine of Equivalents.

It has been contended by defendants that Hoffman's claims are to specific forms, and that he can not invoke the doctrine of equivalents to cover other forms or a changed structure. This is not the law.

Undoubtedly, where the claim is restricted to particular mechanical *details* of construction (which Hoffman's is not), and another party improves and broadens the purposes of the structure by taking out or putting in something not contemplated by the patentee, the claim may not be construed to cover the improvement. This was all that was decided in Dedrich *v.* Gardner (50 F. R).

But in that case the case the court said :

> " The doctrine of equivalents can not be invoked to *suppress improvements.*"

But what "*improvements*" have defendants made? There is not a word of testimony in behalf of defendant's that the slight details of changes made by them have improved or changed the shelf in any way. These changes are colorable, merely for evasion.

So even in P. H. Murphy & Co. *v.* Excelsior Co. (76 F. R., 965), the court held that in cases in which the claims of the latter patent were based on a slight improvement in existing machines the patentee is protected against " mere colorable evasions."

If defendant's structures are anything more than mere colorable evasions of Hoffman's claims, it has failed to show it.

This is the substance of all the decisions which defend-

ants have, at different times, referred to, assuming that the claims are specifically limited.

But Hoffman's claims, while not broadly to *any* kind of frame and arrangement of rollers, are not limited to specific details, as has been pointed out.

Further, the courts have held that when the utility of a structure has been demonstrated by extensive use, the claims of complainant's patent should be liberally construed.

Sessions *v.* Romadka, 145 U. S., 29.

In Cantell *v.* Wallick (117 U. S., p. 695), the Supreme Court, quoting from Machine Co. *v.* Murphy, said:

> "In determining the question of infringement, the court or jury, as the case may be, are not to judge about similarities or differences by the names of things, but are to look at the machines or their several devices or elements in the light of what they do, or what office or function they perform, and to find that *one thing is substantially the same as another, if it performs substantially the same function, in substantially the same way to obtain the same result*, always bearing in mind that devices in a patented machine are different in the sense of the patent law when they perform different functions or in a different way, or produce a substantially different result."

See, also, Winans *v.* Denmead, 15 How., 330.

In another leading case, Seymour *v.* Osborne (11 Wall., 566; Curtis on Patents, 309), the Supreme Court of the United States has said:

> "Mere formal alterations in a combination of letters patent, however, are no defense to the charge of infringement. * * *
>
> "*Bona fide* inventors *of a combination* are as much

> entitled to suppress every other combination of the same ingredients, to procure the same result, not substantially different from what they have invented and caused to be patented, as any other class of inventors."

There is not to be found anywhere in the record or in the arguments even an effort on the part of the defendant to point out any difference in effect resulting from the changes in structure made by the defendant.

The Accounting.

On demand of the complainant, the defendant (Rec., pp. 234–6) furnished a statement showing the number of infringing shelves of different styles made and sold to that date, the cost of production, average cost, the average selling price, the proportion of expenditures to receipts in the general business, and the proportion of the business chargeable to shelves and cases.

Upon this statement there was an admitted total profit of $3,040.30 in the sale of 24,498 shelves, or 12½ cents per shelf.

The witness Lomb stated that he had prepared said statement, that he was the party best qualified to do so, and that it was correct.

It therefore can not be contended that there is no evidence of any profit in the manufacture of the infringing structure.

The aforesaid statement, together with the bills and books produced by Lomb, were the basis of the cross-examination, which showed, as the Auditor found—

1. The total number of shelves sold to September 1, 1896. (Rec., p. 284.)

2. The "entire * * * cost of manufacture." (Rec., p. 284.)

3. The sizes of the different shelves sold. (Rec., p. 284.)

4. The prices at which shelves of different sizes were sold with cases, as shown by defendant's list of prices. (Rec., pp. 287 and 294.)

5. That of the total cost and total selling price one-half is allowable to the case and must be deducted, thus giving the cost and amount received from the sale of shelves. (Rec., p. 288.)

6. The proportion of general expenses of the defendant's business to be borne by the shelves. (Rec., p. 288.)

7. The total profits realized from the sales of the total number of shelves.

Of the above findings, the first, second, third, fourth, and sixth are based, not upon the estimates or averages, but on the actual numbers or amounts disclosed by the testimony.

The Auditor could not ascertain specifically the precise amount received from the sales of shelves and cases, but we submit that with proof as to the actual normal selling prices he was justified in assuming sales at such prices, where the defendant would not or could not produce evidence to the contrary.

First Exception.

The master found the *average selling price per shelf* (in cases), by dividing the total amount received, $105,736.75, by the total number of shelves, 46,623, giving $2.27, a sum exceeding by two cents the schedule price of the standard size of shelf.

Defendant contends that the testimony shows that it did not always sell at schedule rates. If such was the fact, it was its duty to show specifically where there was a departure. If, as asserted, its books were so kept that it could not do so, that the cost of the shelves and selling price was mingled with other articles, this failure can not count to defendant's advantage. The principle stated in Walker on Patents, section 717, is that the defendant can not plead his imperfect book-keeping as an excuse in such cases. If he mingled the products of different articles he can not plead this as an excuse.

> "Where a defendant mingled profits which he made as an infringer with those he made otherwise, and there was no criterion by means of which they could be separated, he must submit to the recovery of the whole."
>
> Walker on Patents, 3d ed., p. 548, sec. 717.

Further, on this, as well as in proving the cost of manufacture, and on other points, the complainant has, beyond question, furnished the best evidence he could obtain. This the court will accept.

In Manufacturing Co. *v.* Cowing, (105 U. S., 257), the court found for plaintiffs upon an *estimate* of cost, the proof being defective.

See, also—

Emigh *v.* B. & O. Co., 6 F. R, 283, where, in view of conflicting testimony, the court itself fixed the profits.

In Herring *v.* Gage (3 Banning & Arden, 399), the court found that when there could be no direct evidence, from failure of defendants to keep account, the best evidence was admissible.

This evidence need not be absolutely exact, but only "reasonably definite and convincing." (Walker, sec. 715.)

The proof in accounting "needs not to be severely accurate, but may be sufficient where it furnishes foundation for just inferences rather than certain knowledge." (Walker, sec. 719.)

See, also, Adams *v.* Keystone (41 F. R., 597.) This case was reversed by the Supreme Court (151 U. S., 139), but the Supreme Court did not reverse the ruling that the parties were not required to prove the accounts with absolute precision; but the court below was reversed because the expenses of defendants were *assumed* from those of a third party.

Absolute proof of the precise items of profit is not required either in showing profits or damages.

In Creamer *v.* Bowers (35 F. R., 208) it was held that when complainant made out his case as best he might when defendants could have given exact information, the master's performance of his task with as near an

approach to accuracy as could be looked for under the circumstances was sufficient.

In Tuttle *v.* Claflin (76 F. R., 227), the court, from the record, made an approximate estimate.

It is therefore submitted that the master was justified in his finding as to the selling prices of shelves in cases, and that the first exception should be overruled.

Further, in asking the court to throw out the Auditor's findings because the sales were in competition with the complainants at reduced prices and are not shown, the defendant is pleading its own wrongdoing as a defense.

The accounting is to ascertain the profits derived by defendant from an illegal making, selling, and using of articles belonging to plaintiff. Defendant says that its prices were reduced by competition. Plaintiff admits competition, and shows that the Office Specialty Company were its competitors, reducing its sales and profits.

If the defendant had shown the precise amount received from sales, in competition or otherwise, its figures could not have been ignored, but as all of these sales were illegal, and as, in consequence of the illegal competition of defendant with plaintiff, this suit became necessary, and as defendant, when it reduced prices to defeat plaintiff's sales, kept no exact account, it is not competent for the defendant to plead its failure to keep exact accounts as a reason for throwing out the estimates based upon schedule rates.

The Auditor had sufficient evidence of selling prices in the defendant's schedules, but his estimate was not based on these alone, as stated (Rec., p. 287)—

"This average is further corroborated by the

average prices of the New York sales and San Francisco sales reported in Exhibit Memoranda No. 1."

The report of the Auditor and his careful schedules show that every effort was made to secure exact figures. Schedule A gives the various sizes of shelves from 11 to 24 inches; it gives the exact number of each size sold, and the cost of different sizes as shown by the bills of the makers, and it gives the selling prices of different sizes as shown by the defendants' schedules of selling prices. We submit that a skilled accountant, taking account of the running expenses of a business, could not have gone into a more careful detail or arrived at more correct results.

The cases relied upon by defendant in the court below, to support its contention that the exact amount received from sales must be proved, are not to that effect.

In Keystone *v.* Adams (151 U. S., 139) it was decided that complainant might offer proof of defendants' profits. In that case the infringing structure was a complex machine, only one feature of which embodied the patented improvement; and in the absence of proof showing the profit from the use of other parts, it was held that only nominal damages could be obtained. The master's report was set aside because he estimated the defendants' profits from what "certain third companies were alleged to have made from the sale of similar devices." In other words, he did not, as the order of the court required, ascertain defendants' profits from the best means obtain-

able, but ascertained those of a third party and applied the estimate to the defendants'.

In Tilghman *v.* Proctor (125 U. S., 136) the court sustained certain estimates of the Auditor as to profits based on a careful weighing of conflicting testimony. There is nothing in the decision (which relates to a process, and not to an article, so that a different rule of accounting is involved) going to sustain the contention of defendants that the master can not, by examining defendants' books and records, determine, as near as possible, the amount of profits resulting from the sale of infringing articles.

In Garretson *v.* Clark (111 U. S., 120) the master reported that no proof was presented that any profit had been made. The invention was embodied in only a distinct part (a clamp) of an entire article (a mop), and plaintiffs had failed to show the value of this new part.

Where the invention embodied the whole article, the rulings of the court have always been to the effect that the entire cost of the article should be considered.

Warren *v.* Keep (155 U. S., 268):

> "It is, no doubt, well settled that where a patent is for a particular part of an existing machine it is not sufficient to ascertain the profits on the whole machine, but it must be shown what portion of the profits is due to the particular invention secured by the patent in suit. (Blake *v.* Robertson, 94 U. S., 728; Dobson *v.* Hartford Carpet Co., 114 U. S., 439.) But it is equally true that where the patented invention is for a new article of manufacture, which is sold separately, the patentee is entitled to damages arising from the manufacture and sale of the entire article. (Manufacturing Co. *v.* Cowing, 105 U. S., 353; Hurlbut *v.* Schillinger, 130 U. S., 456; Crosby Valve Co. *v.* Safety Valve Co., 141 U. S., 441.)"

There is a radical difference in the proof required in the case of the profits derived from the *use* of a machine or process (as in Tilghman *v.* Proctor, and Loom Co. *v.* Higgins, 43 Fed. Rep., 673) where complainant must show the profits derived from using a new process or machine instead of an old one—and the proof required where the profits result wholly from the sale of an article (as in Warren *v.* Keep). It is obvious that in the latter case the advantage results in the sale, and not in the use—and that where the invention involves the article as a whole it is not necessary to prove the profit derived from any specific part, as in Garretson *v.* Clark, 111 U. S., 120, cited by the defendant; or Seymour *v.* McCormick, 16 How., 480, where only part of a patented machine was infringed.

Second Exception.

The Auditor ascertained the total number and cost of shelves, in cases and separate (Schedule A, p. 294) from the bills of the makers, Yawman & Erbe (Auditor's Report, p. 287). Certainly no better evidence could be adduced. The Auditor, in abundant caution (although there were some shelves not in cases), gave the defendants the benefit of assuming that all were in cases, and after finding the total cost deducted the cost of the cases from the whole amount, leaving a remainder which, divided by the number of shelves, gave 99 cents as the cost per shelf.

Defendant, in its brief, contends that the Auditor should not have given it the benefit of this assumption,

although the difference in result is insignificant. It would be competent for this court to increase the award found by the Auditor by reducing the cost of manufacture to, say, 95 cents per shelf, as the court did in Manufacturing Co. *v.* Cowing (105 U. S., 257), where the court said "the cost of production has been much underestimated by the master * * * we have made the best estimate we can from the material furnished by the record," and thus correcting the error, awarded the plaintiff an estimated amount as profit.

Third Exception.

This excepts to the finding of an average cost of construction of 49½ cents per shelf, asserts the actual cost to be 70 cents per shelf, and alleges the average cost price of 2,206 shelves without cases as 87 cents per shelf, basing this on the showing in "Exhibit Shelves Without Cases."

We submit that there is no sufficient evidence whatever as to the figures indicating cost found in "Exhibit Shelves Without Cases."

"Exhibit Shelves Without Cases" was filed pursuant to plaintiff's request of October 13, 1896 (p. 231), asking that defendants be required to produce evidence "showing *the number* of such roller shelves made for and furnished to the said company from April 7, 1891, to this date." That was all that was asked for by plaintiff. The memoranda was furnished in the form of an affidavit, upon order of the Auditor, volunteering also the cost, *but no witness was produced and there was no opportunity to cross-examine*, and the statement was taken

only for what was asked for, *i. e.*, *the number* of shelves made.

Plaintiff, time and again, during the taking of testimony, made every possible effort to have the defendants give some fair estimate of cost and selling prices of shelves alone, but on every occasion was told it was impossible. (See fol. 414, Rec., p. 234; and p. 237, first clause.)

As to the total cost of shelves and cases, this is shown to a cent by the Yawman & Erbe bills, but defendants' third exception is practically to the action of the Auditor in dividing the cost equally between the cases and shelves. But he had evidence to support his finding. The Auditor acted on the best evidence obtainable.

As regards the selling price, defendants' witness Lomb would not make any estimate as to the proportionate cost of shelves and cases. He said (p. 168) "*I can not tell* what the proportionate cost would be."

Under these circumstances, where defendants' witnesses state they can not supply proper information on which to base an estimate either of the actual cost of the shelves alone or of the selling prices of the shelves alone, the plaintiff is at liberty to get the next best evidence.

Herring *v.* Gage, 3 Banning & Arden, 399.

This evidence was defendants' books and schedules, and, in addition, plaintiff produced Hine, a practical manufacturer, who gave specific figures and showed that the actual cost of a 20-inch shelf to the Fenton Company was 45 cents per shelf. (Hine, p. 219, folio 384;

p. 221, and Exhibit "Hine's Statement," pp. 227 and 223.)

> NOTE.—The addition of 25 per cent., or 11 cents, in this statement was error. (Hine, bottom of Rec. p. 229.)

This evidence of Hine was taken merely to confirm the estimate made from defendants' books and schedules showing that it agreed with the actual cost to other parties.

Further, Hine states (bottom of p. 221) that in the manufacture by the Fenton Company the cost of shelves and cases is about equal. This gave the Auditor proper grounds for his estimate.

Further, Lomb produced "Schedule No. 2" (bottom of Rec. p. 228), which, after giving schedule prices for fourteen different sizes of shelves "with cases," says, "roller-book shelves, *without cases, deduct 40 per cent.*"

It therefore appears that the Auditor did not fix the cost "by pure speculation and guesswork," as alleged.

The total cost of cases and shelves having been had from the bills, the Auditor, giving the defendant the benefit of every doubt, deducted 50 per cent. (Rec., p. 288) for the cases, thus obtaining the cost of the shelves.

What constitutes the cases as meant in his testimony is stated by Lomb in folio 345, p. 197. He states (top of Rec. p. 200) that *he does not think* that the case would cost more than the shelves.

It is, therefore, submitted that the Auditor had ample ground, from the testimony and from the definite state-

ment of Schedule No. 2, to find that the cost and the profit should, on the average, be equally divided between the shelves and the cases. But even if, as contended by defendant, the plaintiff has not proved exactly either the cost price of the shelves alone or the selling price of the shelves alone, it is shown that—

1st. They have so closely approximated it that any disinterested person would be convinced of its substantial accuracy.

2d. In so far as they have not been exact, it is the fault of either the defective accounts of the defendant or of its unwillingness to furnish better information.

Under these circumstances the court will accept the evidence as sufficient.

See, also, the other authorities cited in the consideration of the first exception.

Herring *v.* Gage, 3 Banning & Arden, 369.

It is further submitted, that in view of the above quoted testimony of defendants (that it was impossible to fix the relative cost of shelves and cases), they can not properly now ask that any weight be given to the figures in "Exhibit Shelves Without Cases," volunteered in an affidavit without request of plaintiff, without cross-examination, and based only on a very limited number of shelves. The average of 50,000 shelves, considered by the Auditor, is more nearly correct than that of 2,000, referred to in the exhibit.

Further, the third exception is not one which was taken

to the draft report, there being no exception to the draft report asking any finding fixing the cost of the shelves without cases.

The third exception differs from that to the Auditor's draft report, which did not ask the Auditor to find any cost price, but asked him to report "that he was unable to find from the evidence what such cost of manufacture was."

The exception, for this reason, is inadmissible.

> "According to the correct practice, no exceptions to a report can be considered which were not taken before the master in the form of objections to his draft of the report. The reason for this rule of practice is that the master might have allowed the objections and corrected his report, if errors had been pointed out to him, thus saving the parties unnecessary expense and the court unnecessary trouble."
>
> Celluloid Co. *v.* Cellonite Co., 40 Fed. Rep., 477.

If the defendant had evidence to show that the average cost of the shelves without cases was 87 cents, as contended for the first time after the Auditor's report, why did it not present it in form for cross-examination when called upon to do so?

The Fourth and Ninth Exceptions.

This raises the question of the identity of the New No. 4 Roller Shelf and those that are shown in defendant's catalogue, Fig. 17, and Hansmann sketch.

These exceptions were sustained by the court (Cox, J.) on the ground of want of jurisdiction of the Auditor. The court did not consider the identity of the shelves.

The Fifth Exception.

The defendants contend that the Auditor erred in determining the selling price of the shelves from the schedules, and contend that inasmuch as the names of some of the purchasers were given, the plaintiff could have followed these purchasers up and ascertained what each purchaser actually paid.

This question was fully inquired into. Lomb stated that the first accounts and memoranda which he produced were produced by the aid of "our help at the office at Rochester; also the different managers at our different branch offices" (Rec., p. 163); and that these memoranda related to the sales. He says that he had these parties "look up the sales of the shelves, note them down, and compare part of them with the books (p. 163); that these agents (p. 171, folio 298) reported monthly the total sales, expenses, etc.; that (p. 173) "we have no memoranda or records except as might appear on the order given by Richter," as to the parties for whom the shelves were to be erected or put into use that were sold by Richter & Co.; and that (p. 173)—

> "the agents, such as Richter & Co. of Pittsburg, in many instances, do not give the names nor the amounts at which the goods are sold."

Lomb states (p. 174, fol. 302):

> "*It is impossible for me to get at the selling price of those shelves* for the reason that most of them have been sold in combination with other goods which we manufactured, and in some instances the shelves are one-half and in some one-hundredth part of such cases—that is, of the entire job."

It, therefore, appearing from Lomb's own statements and admissions, and examination of the memoranda furnished, that all but an insignificant portion of the shelves were sold in combination with other materials, and that Lomb himself nor the agents of the company were not able in any way to ascertain with precision the relative amounts received from shelves and other parts in the jobs which they put up, it was, therefore, obviously impossible for the plaintiffs, by inquiry of purchasers, to find out what proportion of what they paid was paid for shelves and what for cases or other features connected with the cases. Defendants, therefore, are in error in the assertion that there was any means whatever by which the plaintiffs could follow up the purchasers and ascertain from them any more than has been ascertained from Lomb himself.

It must be borne in mind that the agents were practically the servants or employés of the company ; that they were charged in various ways with the prices of the goods, and sometimes sold on commission (p. 171, fol. 298), but (p. 172) these agents or managers at the different branch offices were salaried agents of the company. It would, therefore, appear that anything paid to these agents in the way of commission would be deducted from the general expenses constituting a part of the gross expenses of the company, and, therefore, a part of the .3837 per cent. deducted by Lomb in his statement (p. 235 *et seq.*) and allowed by the Auditor.

The Sixth, Seventh, and Eighth Exceptions.

These are fully replied to in considering the other exceptions.

Ninth Exception.

This has been considered in connection with the fourth exception.

Tenth and Eleventh Exceptions.

Steuart was produced as an expert to testify upon the question of invention in view of the state of the art, as to letters patent No. 557,392, introduced in evidence improperly on the accounting, and generally on the question of invention, to induce the Auditor to set aside the decision of the court on this point. As stated by Steuart regarding the infringement of Hoffman's patent by the shelves like " Exhibit Hansmann Sketch " (Rec., p. 216):

> "Q. And you intend to state that you do not agree with the court, as I understand?
> "A. So far as that part of the opinion I have expressed is concerned; yes."

Obviously, such evidence is inadmissible.

But the best answer to this exception is the fact that Steuart's testimony was practically admitted, considered, and overruled, the Auditor deciding, notwithstanding this evidence, that the new No. 4 shelf was within the scope of the order of the court and an infringement of the Hoffman claims. (Rec., pp. 291–293.)

The Twelfth Exception.

This exception should be overruled because:—

1st. The statute (R. S., 4900) requires only proof " that the defendant was duly notified of the infringement."

As the defendant here was admittedly privy to the interference proceedings, ending in the grant of the

patent to Hoffman, further proof of notice was not required.

2d. Because the exception was for the first time presented in the exceptions to the final report, and the court must disregard every exception which was not taken to the draft report.

Celluloid Mfg. Co. *v.* Cellonite Co., 40 F. R., 477, and authorities cited.

Troy Co. *v.* Corning, 3 Fish, 497.

3d. Because the objection comes too late, not being raised by the pleadings, nor at the trial, nor before the master. "It is too late for defendants to raise the point before the master."

Rubber Co. *v.* Goodyear, 9 Wall., 801.

The Supreme Court, in Dunlap *v.* Schofield (152 U. S., 249), refers to Rubber Co. *v.* Goodyear as the leading case on this point.

> "The defendants can not avail themselves of the defense, because they have not set it up in the answer. (Rubber Co. *v.* Goodyear, 9 Wall., 788.)"

Herring *v.* Gage, 3 Banning and Arden, 402.

Further, defendant continued to manufacture after the filing of the bill.

4th. The failure to affirm defendants' twelfth exception was not assigned as an error (Rec., pp. 301–303) on appealing from the decree of the court (Rec., p. 300) affirming the Auditor's report on all points "excepting as to the matters set forth in the exceptions 4 and 9," which related to the new No. 4 shelf. The defendants thus

But Jewell admits defendant's knowledge of the patent immediately after its issue. (Jewell, Rec., p. 67, X-Qs. 264, 265.

acquiesced in the decision (Rec., p. 299) that "the twelfth exception is overruled as setting up a defense to the bill which was not made in pleadings."

The Exceptions Generally.

The exceptions generally ask the court to find that the defendants had realized no profit from the shelves, and submit that the Auditor should have found that he was unable to find from the evidence what was the cost of manufacture or selling price.

This position is untenable, from the fact that Lomb's original statement (pp. 234, 235) admits a profit of $3,040.30, or over 12½ cents per shelf in the sale of 24,498 shelves, although this is found by adding together on the expense side the cost of manufacture (by other parties) and the gross expense of the defendant company. Having thus, under oath, admitted a considerable profit, defendants are not in position to pray that the court find that the Auditor should have found no profit, or reported himself unable to determine *any* profit.

This is a case where the defendants were parties to a contest in the Patent Office, claiming the invention of the (now) Hoffman patent. They appealed from two decisions against them, and after the third decision by the Commissioner in favor of Hoffman they deliberately continued their manufacture and resisted the demand for an injunction on the ground that there was neither novelty nor patentability in the invention for which they had so long contended. As the evidence shows, defendants went into the market, competing with the

plaintiff, about 95 per cent. of the sales being in competition.

It is submitted that the circumstances here justify the application of the rule laid down in Creamer *v.* Bowers (35 F. R., 208), that every doubt and difficulty should be resolved against a wanton infringer.

Unless the Auditor has undoubtedly erred, his report should be approved.

The conclusions of the master, depending upon the weight of conflicting testimony, have every reasonable presumption in their favor, and are not to be set aside or modified unless there clearly appears to have been an error or mistake on his part.

Tilghman *v.* Proctor, 125 U. S., 149, 150.

In considering the Auditor's report, it must be borne in mind that claim 1 of the patent sued upon includes the cases, as well as the shelves, it being proved that 95 per cent. of the shelves are sold in cases. It was not absolutely necessary, in the accounting, to separate the two, if owing to the defendant's bookkeeping the profits could not be divided.

Walker on Patents, 3d ed., sec., 717, p. 548;
Hurlburt *v.* Schillinger, 130 U. S., 456;
Heaton *v.* MacDonald, 57 F. R., 648;
Warren *v.* Keep, 155 U. S., 268.

The Auditor's conclusions will stand unless clearly erroneous.

Tilghman *v.* Proctor, 125 U. S., 149;
Celluloid *v.* Cellonite, 40 F. R., 477.

CHARLES ELWOOD FOSTER,
Solicitor and of Counsel for Appellee.

OFFICE SPECIALTY MANUFACTURING COMPANY *v.* FENTON METALLIC MANUFACTURING COMPANY.

APPEAL FROM THE COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA.

No. 253. Argued April 20, 1899. — Decided May 15, 1899.

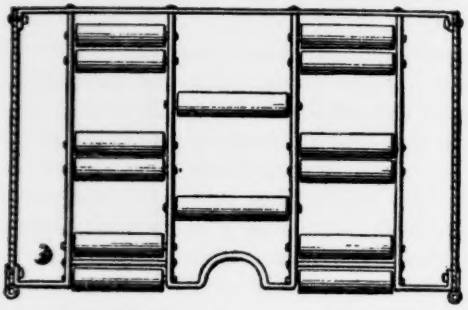
Every element of the combination described in the first and second claims of letters patent No. 450,124, issued April 7, 1891, to Horace J. Hoffman for improvements in storage cases for books, is found in previous devices, and, limiting the patent to the precise construction shown, none of the defendant's devices can be treated as infringements.

THIS was a bill in equity filed in the Supreme Court of the District of Columbia by the Fenton Metallic Manufacturing Company against the appellant to recover for the infringement of letters patent number 450,124, issued April 7, 1891, to Horace J. Hoffman, for improvements in storage cases for books.

In the specification the patentee declares that " the object of my invention is to facilitate the handling and prevent the abrasion and injury of heavy books, etc. It consists, essen-

tially, of the peculiar arrangement of the guiding and supporting rollers, and of the peculiarities in the construction of the case and shelves hereinafter specifically set forth."

The following drawing of one of the shelves exhibits the peculiar features of the invention. The drawing explains itself so perfectly that no excerpt from the specification is necessary to an understanding of the claims.



The two claims alleged to have been infringed are as follows:

"1. In a storage case for books, etc., the combination of a supporting rack or shelf composed of metallic strips and having a reëntrant bend or recess in its front edge and rollers journalled in said rack and projecting above and in front of the same on each side of said bend or recess, substantially as described.

"2. In a book shelf, the combination of a supporting frame, a series of horizontal rollers, the front roller in two separated sections, the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections, substantially as described."

The defendant, the Office Specialty Manufacturing Company, was the assignee through mesne assignments of Jewell and Yawman, whose application for a patent, filed November 6, 1888, was put in interference in the Patent Office with the application of Hoffman, filed February 12, 1887, and the interference proceedings on behalf of Jewell and Yawman were

conducted by the parties who subsequently formed the Office Specialty Manufacturing Company. The Examiner of Interferences, the Board of Examiners-in-Chief, and the Commissioner of Patents successively decided in favor of Hoffman, to whose assignees the letters patent were subsequently issued. During the pendency of the interference, the Hoffman application was divided, as permitted by the rules of the Patent Office, to secure a patent for certain features not involved in the interference.

Upon a hearing on pleadings and proofs a decree was entered adjudging the patent to be valid, and the first and second claims thereof to have been infringed by the defendant; and the case was sent to the auditor to determine and report the profits and damages resulting from the infringement.

After certain proceedings, taken with respect to several infringing devices, not necessary to be here set forth, a final decree was entered in favor of the plaintiff, which, so far as respects the validity of the patent, was affirmed by the Court of Appeals, with an allowance for damages, which had been rejected by the Supreme Court. 12 App. Cas. D. C. 201. Whereupon the defendant appealed to this court.

Mr. Melville Church for appellant. *Mr. Joseph B. Church* was on his brief.

Mr. Charles Elwood Foster for appellee.

Mr. Justice Brown delivered the opinion of the court.

We consider the question of the validity of this patent as the decisive one in this case. The patent was adjudged to be valid by the Supreme Court of the District of Columbia, as well as by the Court of Appeals. It had been held to be invalid by Judge Lacombe, sitting in the Circuit Court for the Southern District of New York, upon a motion for a preliminary injunction, *Fenton Metallic Manufacturing Co.* v. *Chase*, 73 Fed. Rep. 831, and by Judge Wheeler, upon a final hearing of the same case, 84 Fed. Rep. 893.

The elements of Hoffman's combination, as described in the first claim alleged to be infringed, are (1) a supporting rack or shelf composed of metallic strips; (2) a reëntrant bend or recess in its front edge for the insertion of the hand; and, (3) rollers journalled in the rack and projecting above and in front of the same on each side of the recess. In the second claim the combination is described as (1) a supporting frame (apparently including one of wood as well as of metal); (2) a series of horizontal rollers, the front rollers being in two separated sections; (3) the intermediate part of the frame being carried back to permit the admission of the hand between said roller sections. It may be remarked in passing that none of the decisions in the Patent Office in the interference proceedings dealt with the question of prior devices.

The introduction of rollers in book shelves is undoubtedly a convenient and valuable device for preventing the abrasion of large and heavy books which are obliged to be laid flat upon the shelves, especially when they are subjected to frequent handling; but the employment of roller shelves at the time Hoffman made his application for a patent (February 12, 1887,) was by no means a novelty. Indeed, plaintiff's own expert testifies that "it was common to use what were called roller shelves, the same consisting of frames or supports and longitudinal parallel rollers, which extended the entire length of the shelf and served to reduce friction in putting books upon and withdrawing them from the shelf. One form of such shelves is shown in complainant's exhibit, Office Specialty Manufacturing Company's catalogue, Figure 16." This exhibit shows a shelf frame made of bent steel, firmly riveted together, containing three continuous rollers, each of the full length of the shelf made of steel in tubular form. Continuing the witness said:

"The use of such shelves was, and is, however, limited because of certain defects; for instance, one of the principal defects is the liability of the person placing the book upon the shelf to have the fingers pinched between the book and the front roller in placing the book on the shelf. With light, small books this, of course, was not a matter of special im-

portance, and the shelves can be used with such books, but the class of books for which such shelves are especially adapted is heavy books, such as are used in keeping Government records, weighing, in many instances, from ten to twenty-six or even thirty pounds, and quite large, and with such books the liability to injure the fingers in putting them on and taking them from the shelf is very great."

So long before Hoffman's application as the year 1870, Samuel H. Harris had obtained a patent, No. 107,042, for a shelf of three parallel wooden rollers covered with sheet metal, the specification of which seems to assume that wooden rollers had theretofore been used in iron cases for books.

A patent issued in 1876 to John L. Boone, No. 182,157, describes his invention as consisting "in attaching rollers to the front edges of book shelves, so that when a book is withdrawn from or placed upon the shelf it will move over the roller instead of over the edge of the shelf." This is to obviate the danger of the book being abraded by the sharp corners of the shelf over which it is dragged, especially if the shelf is higher than the level of the person's head who handles it.

A patent issued in 1885 to Walter H. Conant shows a similar arrangement of front rollers to protect the books.

In a patent to Marion T. Wolfe of October 7, 1879, No. 220,265, there is shown a book case in which three series of short rollers, each inserted in what the patentee calls a "box," are employed as a support for the books. These boxes run at right angles to the front of the case, and they are so constructed that the hand may be introduced between any two series of rollers in order to more readily grasp the back of the book, without liability of the fingers being caught by the edge of the shelf.

A device somewhat similar to that patented to Harris is shown in a patent issued in 1886 to A. Lemuel Adams, wherein a shelf is provided with a series of parallel short rollers, the front rollers being supported upon spring arms, which are carried forward so as to permit of the introduction of the hand between them, and thus facilitate the withdrawal of the book, without liability of contact of the fingers with any portion of

the shelf. When a book is to be placed in position, it is first rested upon the spring rollers, which by their elasticity assist in forcing the book upon the fixed rollers, when it is easily passed by such rollers to its proper place. The extension of the elastic rollers in front of the shelf would seem to prevent the use of doors in front of the shelves, and it is clear they do not support the books when in place.

There was also oral testimony showing that there were in use in the court house in Richmond, Indiana, in the year 1873, and thereafter, unpatented roller shelves for books, consisting of a wooden shelf, having the ordinary hand hole at the front, upon each side of which there were short rollers similar to Hoffman's, though some distance from the front edge, which enabled the back of the book to be readily grasped and easily withdrawn upon the rollers. The evidence showed that hundreds of these rollers were used, and one of them, taken from the court house in Richmond, was introduced as an exhibit.

Comparing these several devices with the patent in suit, it is manifest that every element of the combination, described in the first and second claims, is found in one or the other of such devices. Roller shelves are found in all the patents above described as well as in the Richmond shelf, and if there were any invention in substituting metal for a wooden frame, it appears to have been anticipated in the shelf used by the Specialty Company, known as figure 16, the existence of which before the Hoffman application for a patent is admitted by plaintiff's expert as well as by the manager of the plaintiff corporation. It was no novelty to place rollers at the front edges of the shelves, so as to project above and in front of the shelves, as this is shown in the Boone, Conant and Adams patent, and in the defendant's metallic shelf, used prior to the Hoffman application. The employment of semicircular hand holes or recesses, for more readily grasping the books, is such a familiar device in upright partitions for holding books that scarcely any banking or record office is without them, and the court may properly take judicial notice of their use long prior to this patent. *Brown* v. *Piper*, 91 U. S. 37; *Terhune* v.

Phillips, 99 U. S. 592; *King* v. *Gallun*, 109 U. S. 99; *Phillips* v. *Detroit*, 111 U. S. 604, 606. If there were any invention in applying them to roller shelves, Hoffman is not entitled to the credit of it, since they are shown in the so-called Richmond shelf. The construction of the Wolfe and Adams patents is also such as to permit the introduction of the hand for grasping the book without coming in contact with the edge of the shelves.

Putting the Hoffman patent in its most favorable light, it is very little, if anything, more than an aggregation of prior well-known devices, each constituent of which aggregation performs its own appropriate function in the old way. Where a combination of old devices produces a new result such combination is doubtless patentable, but where the combination is not only of old elements, but of old results, and no new function is evolved from such combination, it falls within the rulings of this court in *Hailes* v. *Van Wormer*, 20 Wall. 353, 368; *Reckendorfer* v. *Faber*, 92 U. S. 347, 356; *Phillips* v. *Detroit*, 111 U. S. 604; *Brinkerhoff* v. *Aloe*, 146 U. S. 515, 517; *Palmer* v. *Corning*, 156 U. S. 342, 345; *Richards* v. *Chase Elevator Co.*, 158 U. S. 299. Hoffman may have succeeded in producing a shelf more convenient and more salable than any which preceded it, but he has done it principally, if not wholly, by the exercise of mechanical skill.

If there be any invention at all in this patent, it is not to be found in the combination described in the claims, but by a reference to the drawing, and in the words "substantially as described." This would confine the plaintiff to a metallic frame divided longitudinally into three sections, each fitted with short rollers, two of which project above and forward of the front bar of the frame, which is bent inward in front of the middle section to form the "reëntrant bend or recess" for the insertion of the hand.

But in whatever light this device be considered, it is evident that, limiting the patent to the precise construction shown, none of the defendant's devices can be treated as infringements, since none of them show a shelf divided into three sections, and none of them, except possibly one, the manu-

facture of which was stopped, indicate a bend in the front bar of the frame to form the recess for the insertion of the hand.

The decree of the court below must be

Reversed, and the case remanded to the Court of Appeals with directions to order the bill to be dismissed.